

HUNGRY PEOPLE AND EMPTY LANDS

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*An Essay on Population Problems
and International Tensions*

BY

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TO THE MEMORY OF MY
FATHER AND MOTHER

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S. C.

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INTRODUCTION

One of the gravest problems of our time is presented by uncontrolled human fertility. The world's population to-day is greater than it has even been before ; it has grown from about 540 millions in A.D. 1050 to more than 2·4 billions in 1951. And it is increasing by about 68,000 people every day, or about 25 millions a year, of which India alone contributes about five millions. At this current rate of increase of more than one percent per annum the population could multiply to 9·2 billions by A.D. 2000 ! Apart from the staggering total number and the incredible pace at which the world's population is growing, there are two other disturbing factors in world demography. One is the international unevenness of population distribution and the other is the unevenness in the growth of different national populations.

World population and its growth *by themselves* mean nothing. The number of people in the world could go on increasing indefinitely without creating any problem *if*, and here we have a very big *if*, the world's resources were sufficient to supply everyone with the basic necessities of civilized existence and assure them of a decent standard of living. But unfortunately they are not. A great majority of the world's population in Asia, Africa and Latin America are denied even the bare requisites of a decent existence. Despite great advances in modern science and technological skill, our total food production, not to speak of other necessities, has not kept pace with the growth of world population. On the contrary, in many regions agricultural production is not only increasing but, what is worse, is actually dwindling. As for natural resources, they do not of course increase with the growth of population.

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inventory of our existing and potential resources and a plan for the development of such latent resources. They contend that the total production of food can be doubled, trebled or even multiplied a hundredfold by a marriage of modern science and technology on the one hand with agriculture and food production on the other. The pressing need is to make the present knowledge of agriculture and related sciences available to the world's farmers. The core of the problem is not really lack of food or even lack of the know-how to produce more food, but one of greater and proper application of the latest scientific knowledge and of more intelligent and more just distribution of the world's resources among the peoples of the world. The starvation and the low levels of living that exist in the world to-day are man-made and unnecessary, for actually there is plenty of food for everyone. To the exponents of this cornucopian school, the world presents the old familiar picture of poverty in the midst of plenty. If a considerable segment of the world's population to-day is underfed, underclothed and underhoused, it is because of our defective economic and political systems and not because of the niggardliness of mother nature.

The third school brushes away all this discussion as either naive or wishful thinking on the ground that we do not have enough knowledge one way or the other to reach a definite conclusion. It is therefore foolish, in the absence of reliable data, to frame policies or recommend remedies. We know as yet little of the potentialities of man or the possibilities of science to warrant either an optimistic or a pessimistic conclusion about mankind's plight or prospects. Our knowledge of even basic population and other vital data for the world as a whole is neither correct nor comprehensive. Besides, science and technology may have many a marvel in store to revolutionize our life and thought. Stubborn facts of nature may become to-morrow welcome

These pressing problems of world demography have received an increasing amount of attention during the past few years, and although almost everyone is agreed upon the seriousness of the population problem in general, there is considerable disagreement over what the core of the problem really is and wherein its solution lies. We can, however, summarize into three broad schools of thought the divergent opinions on this question.

The first school maintains that in many parts of the world food and natural resources are not only not increasing with the growth of population but that instead a steady depletion of these resources is taking place. It is maintained that, no matter what science has achieved, Nature is niggardly and the resources of the earth are finite, and eventual starvation of large numbers is in store unless population growth is severely restricted. Population on the loose can exist only by plundering our planet, and there is a limit to any plunder. The logic of reduced rations therefore becomes inevitable. The increase in the differential rates of growth of the population in different nations aggravates existing differences in land area, food production and consumption. And these differences lead to envy and then to hatred, to international tensions and finally to war. Our only road to survival is through a drastic reduction of human fertility. This school pleads for the universal adoption of birth control and conservation of natural resources on a global scale, if only to banish the possibility of periodical wars and ensure the survival and quality of our species in the long run.

The second school maintains that the world demographic problem is not one of increasing population and vanishing resources, but one of under-production and maldistribution. No thorough survey of all the available resources in various under-developed countries has ever been undertaken. What is needed therefore, to begin with, is an

up a little. All cultures and institutional values are greatly in favour of policies that help to alleviate pain and suffering, prolong life and postpone death. Thirdly, and here is the simple and yet to many countries a baffling problem, fertility continues to be high in the very areas that can least afford huge net additions to existing populations. Now the question is: how can these countries raise their standard of living and cut down their death rates when they are unable to support the existing population even at a poor level, if at the same time their populations continue to increase by three, four or six millions every year? It is obvious that a restrictive population policy based on family planning is indispensable in any plan to develop the under-developed countries.

However, family planning is easier advocated than accomplished. The more backward an economy and the more pressing the need for birth control, the greater the cultural and material obstacles in the path of this reform. And we are reminded here of the dismal fact that the issue of birth control is the only one on which the Vatican and the Kremlin are in agreement. While the reform for family planning must be pioneered, no matter what the obstacle, as indeed Japan and India have begun to do, the world's population problems do not wait till the hunger-haunted millions belonging to different socio-economic levels are converted to the contraceptive idea. Meanwhile the torrent of unwanted babies continues, bringing in its wake increasing hunger and poverty, sorrow and suffering.

But this is not all. Problems of population pressure and its accompanying hunger for land have led in the past, and may lead again in the future, to international tensions and war. No matter what the apparent or immediate cause, wars have their basic roots in land-resource-economic differentials between nations. The uneven distribution of the world's wealth is apparently the key to human aggression,

opportunities. Incredible discoveries of obtaining food from water and air may be round the corner. The Sahara, Gobi and Rajputana deserts may be converted into smiling wheat fields and the Arctic may be thawed into a tropical paradise. The Himalayas may be harnessed to cool India's blazing summers. While the potentialities of science for good or evil can never be underestimated, wisdom may eventually prevail and man may arrive at the millenium. Or, on the other hand, the moral man may be dwarfed by the scientific man and incredible weapons of mass destruction may be let loose on a decadent world. Man may continue his present and periodical preoccupation of destroying his own species and committing collective suicide! It is simply rash to prophesy.

While controversies rage between these and more views, I am persuaded by overwhelming evidence to subscribe to the first school of thought. It is true that world population problems are not simply those of man-land ratio or even population-resources ratio. There are countless aspects to the problem but they boil down to this. The levels of living of a majority of the population in Asia, Africa and Latin America are depressingly low not only in comparison with the standard of living of, let us say, the United States of America or some theoretical optimum, but also in terms of what these peoples themselves think, feel and aspire for as reasonably desirable. The peoples of these depressed areas, no less than their governments, are anxious to raise their levels of living. Secondly, throughout these areas mortality is declining. During the last twenty years the average death rate has been falling in most of these areas as a result of improved medical facilities, better control of epidemics and the discovery of new, life-saving drugs. If, as seems likely, this trend continues, the present rate of the growth of population will not only be maintained for several years to come; it is bound to go

If only this example could be followed by other imperialistic countries! Who knows, a free and prosperous Asia and Africa might help a war-weary Europe to preserve peace and prosper more than Colonialism writ across the world. Problems of international peace and prosperity can never be solved so long as there is chronic hunger. And the areas of endemic hunger are really the colonial areas. For as Dr. Josue de Castro points out, "Hunger has been chiefly created by the inhuman exploitation of colonial riches by the latifundia and the one-crop culture which lay waste the economy, so that the exploiting country can take too cheaply the raw materials its prosperous industrial economy requires."

(2) The compelling need for spreading information on scientific contraception in the underdeveloped countries cannot be overemphasised. In the West, despite some opposition from the Catholic Church, the family planning habit has come to stay, even in Catholic countries. The present task is to carry this reform to the millions of mothers in Asia and Africa. Fortunately, by and large, there is no organized cultural, institutional or religious opposition to family planning in these areas. Once the public health authorities begin to emphasise its importance it will spread even to the traditionally forgotten villages. Once mothers are educated in the belief that there is a scientific device to meet their desperate, albeit latent demands, birth control will make rapid headway. There are, of course, certain special difficulties which should be taken into consideration before planning a network of birth control clinics. It should be recognized that in Asia and Africa, apart from the general rural conservatism of the masses, a majority of the people live under backward and quasi-primitive conditions. Matters like bathrooms, running water, privacy, the cheapness, reliability and availability of contraceptives, and the illiteracy and ignorance of women need attention. But, no

whether racial or national. And the present trends of population growth and the pattern of production and consumption of natural resources in many nations only widen the existing differentials. A global attempt should therefore be made now to solve these problems with international co-operation and goodwill before we are herded into another war 'to make the world safe for democracy', 'to end all wars', or for the sake of some other cliché. An equalization of economic opportunity is therefore a prerequisite to peace. Hence the need for a world population policy.

While population policies are no doubt primarily economic, the policy that is envisaged here is more comprehensive, involving a simultaneous attack on political, economic and social fronts. All these lines of approach are interdependent and all are of vital importance. They are:—(1) the grant of political freedom to all colonial peoples, (2) the universal adoption of birth control, (3) planned international migration, (4) largescale and rapid industrialization and (5) intensive agricultural development.

(1) It is too late in the day to discuss the pros and cons of imperialism. The question to-day is not what the ruling countries think about the ability of the colonial peoples to govern themselves, but how soon alien (ruling) powers can grant political freedom to these peoples. Rapid economic development without political freedom is impossible no matter how benevolent an attitude the ruling power may take towards its colonies. History bears witness to the fact that a colony freed is a greater asset than a slave colony, to the "mother" country and to the world. "A growing United States did as much as India to create Britain's Victorian greatness." The magnificent example of Great Britain in transferring political power to India, Burma and Ceylon has generated a fund of goodwill between the countries with its attendant beneficent repercussions.

Besides American aid, a more liberal attitude on the part of existing international monetary agencies towards under-developed countries is urgently needed. These areas command cheap and plentiful labour. Several Asian countries have proved during the last three decades that unskilled labour from the countryside can be trained into efficient and skilled industrial workers. The fear that the West entertains about an industrialized Asia crowding out Western manufactures in the world market will remain baseless for a long time to come. In all these regions there is a tremendous potential internal market. Once the purchasing power of the Asian peoples is raised, Asian goods will not be enough to meet the pent up demand of a billion customers. As for technological know-how and managerial enterprise, which are sadly lacking in Asia, they must be supplied by the West till such time that as Asian initiative and organizing ability can take over. Such a policy of rapid and large-scale industrialization bringing idle men and machines together will start a kind of beneficent chain reaction resulting in higher levels of living and lower birth rates all over the under-developed world.

But irrespective of the tempo and volume of industrialization, Asia is bound to remain a predominantly agricultural area in the foreseeable future. And such basic economic development as may be planned (for Asia) must concentrate primarily on the agrarian sector. Two broad lines of approach are easily indicated. The first approach should be toward raising the yield per acre. The second should be to bring all the available cultivable land under the plough, though such an effort may not be quite an economic proposition at the beginning. The implementation of this apparently simple twin approach would require nothing short of a social revolution in the countryside. While peasants and farmers all over the world generally offer resistance to reform, it is particularly difficult to break the

matter what the obstacle, this reform must be carried through both as a health and an economic measure. To-day, national wellbeing and international amity are dependent to a large extent on maintaining a stationary population.

(3) A policy of assisted, planned and selective emigration from Asia to thinly settled countries can have a decisive effect on the economic structure of both the sending and receiving countries. Apart from the moral position of thinly populated and yet prosperous countries in a distressed and overcrowded world, those who oppose international migration as a threat to their high standards of living or to their racial or cultural "superiority", may be actually losing an opportunity to raise that standard further, and promoting an atmosphere of international distrust and suspicion in which neither the particular "race" nor culture can progress or succeed unhampered. The difficulties in such a policy are not to be minimized. Nor do I suggest that planned emigration of overcrowded peoples to thinly settled lands will solve all the population problems of Japan, China and India. But even if such emigration does not solve specific population problems, it will at least lessen the strains and tensions inherent in the present Asian demographic situation. It may lessen the possibility of a third World War.

(4) Every underdeveloped region looks to industrialization as an infallible cure to its mass poverty. In some areas, the basic requisites for largescale industrialization, namely, raw materials, capital resources, skilled labour, a market and technological know-how, are available to a greater or lesser degree. A more thorough geological survey of these areas might reveal the presence of rich minerals. Apart from developing potential resources, a better and more scientific use of the available resources is called for. While these areas can pool more of national capital resources, none of these regions is really self-sufficient in this respect.

CHAPTER I

THE DEMOGRAPHIC CYCLE

Despite all the picturesque and speculative mythologies of the great religions that date and explain the genesis of man and his kind, we know to-day, in more or less certain terms, that the genus *homo* has lived on this earth for many hundred thousand years and the species *sapiens* for about 50,000 years. Man's early groping existence must have been precarious, for disease, starvation, violent death and other causes must have severely limited his numbers. Human numbers grew so slowly, almost imperceptibly, over a period of centuries that the population remained almost stationary over a vast stretch of time. When hunting and fishing were the only sources of sustenance, there must have been vast areas all over the world with no human beings in sight. So sparse must have been the population that the density may be set down as say one person per two hundred square miles. Man, of course, did not deliberately control his numbers, as centuries later he learnt to do in many parts of the world. On the contrary, biologically, man continued to multiply as fast as his hostile and uncontrolled environment would permit him to. But when agriculture was discovered, some useful animals were domesticated, and crude pottery and textiles were invented, man began to multiply faster because the resources for his sustenance became larger and more stable and reliable, even though the advent of medicine and sanitation and the conquest of disease were yet to be thought of. Even then there was no question of man's migration in search of new land for food or habitat as there was abundance almost everywhere in terms of the human needs of that day. This must have been so even though man

cake of rural custom in Asia. Besides this, there are a myriad material difficulties. Risks due to seasonal factors such as the unpredictable monsoon, the existence of uneconomic holdings, the lack of finance and equipment, the all-round poverty of the agriculturist resulting in low productivity, soil erosion through an abuse of the land — all these and more demand an overall programme of agricultural reorganization and development touching every aspect of agrarian economy. Above all, the village must become the centre of new life and thought; education, health and recreation must be brought to it. The reconstruction of the village and the rehabilitation of the agriculturist must become the primary concern of the government.

A world population policy with special reference to underdeveloped countries can be formulated on the rough framework of the above suggestions. A policy must have both an objective to be attained and possible means of reaching that objective. The objectives here are clear and simple: a better standard of living and a reduction in the mortality levels for all the peoples of the world. Secondly, these objectives must be attained within the political framework of democracy, freedom and peace. As for the means, they have been indicated in the fivefold approach outlined above. A discussion of the organization and technique necessary to attain these desired objectives is beyond the scope of this essay. A more effective United Nations or a world government may be the answer. But whatever the organizational framework that may be chosen, the basic prerequisite is an awareness of the gravity of world population problems and a real determination to solve them.

The choice before the world to-day is not only between guns and butter but also between half men and whole men.

advance of science and its application to agriculture, industry, medicine and transport in certain countries seem to be offset by epidemics, famine and wars in others.

The total world population for 1940 has been estimated at 2,170 millions. This estimate is based on some intelligent guesses for certain regions where no census has ever been taken and no vital statistics have ever been registered. Besides this, errors of under-enumeration for countries which have a regular but rather inaccurate census make this world total, if anything, an underestimate. Then there are some people in certain small inaccessible regions, in many civilized countries, where modern man has forgotten and perhaps forsaken his fellowman who has not caught up with him in the race to become "civilized", namely—the pockets of aboriginal population almost all over the world. All of these people do not always get enumerated in the various national censuses. And if the present trends of fertility and mortality for the world as a whole continue—and there is every reason to think they will, unless a third world war is let loose upon us—the enumerated population of this planet will by 1950 be only a little less than two and a half billions.³ "Viewed in the long-run perspective, therefore, the growth of the earth's population has been like a long, thin, tapering powder fuse that burns slowly and haltingly and then catches on until it finally reaches the charge and explodes".⁴ We need not wait for some date in the distant future for this explosion to occur, for it has already occurred regionally in

Within the last century when wars have been common all over the world, the human population of the earth has almost doubled." Fairfield Osborn, *Our Plundered Planet* (New York, 1948) p. 23.

3. The provisional figure for the world population for 1949 is 2,367,737,000, according to the Statistical Office of the United Nations: *Population and Vital Statistics Reports Series A. Vol II No. 1* (New York, March, 1951).

4. Kingsley Davis, "The World Demographic Transition" *The Annals of the American Academy of Political and Social Science* (Philadelphia) January 1945, p. 1

had not thought yet of human conquest of nature and pressing her forces into his service.

By 1650, population in particular areas was growing faster though the total world population was only about 465 millions, (that is to say, the population three centuries ago was) about one fourth of the present world population. By 1750, the population had grown to 660 millions; and in 1850, a century later, it exceeded the billion mark and became 1098 millions. The tremendous growth of population in Europe during the eighteenth century was accompanied by the industrial, agricultural and commercial revolutions which began in England and spread over the whole of Europe. The discovery of new lands and the accompanying rise in the level of living in spite of poverty and misery as a result of the beginnings of industrialization, led to the great movements of population from Europe. The movement was accelerated by the invention of the steamship. For instance, the number of emigrants from Europe to the new continents from 1815 to 1914 has been estimated at more than sixty million, twenty million of whom came from the British Isles alone.¹ By 1900, the world population rose to 1,551 millions. In the last ten years, between 1938 and 1948, despite natural and man-made catastrophes over major areas of the world, about 17,000,000 have been added annually, on an average, to the existing world population. In spite of minor wars, epidemics and widespread quasi-starvation, the total population of the world continues to increase by about 20 millions every year, or about 60,000 people a day.² This growth is distributed unevenly, for the

1. Julius Isaac, *Economics of Migration* (London, 1949) p. 60.

2. Though population pressure, among other factors, leads to political and economic tensions and wars, the wars themselves do not solve population problems. During the second World War the population of the world continued to grow. Also, "the theory that war is a biological necessity, that it is nature's method of controlling population and assuring the survival of the strong and the elimination of the weak, is inaccurate and insupportable.

TABLE 2

ESTIMATED POPULATION OF THE WORLD BY CONTINENTS

1800—1919

(IN MILLION)

Continent	1800	1850	1900	1939	1949 (Estimated)
Africa	100	100	141	157	108
America (North)	15	39	110	181	321
America (South)	14	20	41	89	
Asia	600	664	839	1097	1254
Europe	188	268	390	542	593
Oceania	2	2	6	11	12

Any scientific examination of the world's population problems to-day has to be primarily quantitative because an overwhelming majority of the world's peoples as in Asia, Latin America and Africa have not yet reached the stage where qualitative considerations become important or imperative. As qualitative aspects of population problems involve somewhat controversial value-judgments or evaluations varying according to different cultures, and as such a study properly belongs to the realm of eugenics, our study must deal almost exclusively with quantitative or arithmetic aspects. Quantitative population problems revolve round births, deaths and migrations, the only factors that condition the growth or decline of peoples. And our analysis, to begin with, must be confined to these three factors.

An analysis of the growth of the world's population, (primarily of the populations of the western and industrialized countries which have gone through various stages of development), reveals something in the nature of a cycle. A demographic cycle can be said to have begun when man effected a marriage between agriculture and industry on the one hand and science on the other, that is, with the agri-

Germany, Japan and Italy, plunging the world in a six-year war. Another explosion, as we shall see later, may not be far off.

The population of the world, despite its differential and uneven growth in different regions, can to-day be regarded as a single entity ; and though the rate of growth has declined in some parts of the world during the last half century, the population of the world as a whole has been increasing at the rate of one percent—a rate of increase that can double the population every seventy years. The differential rate of growth, through the varying degrees of control over the fertility and mortality of different continents, peoples, nations, and communities has, in a word, created the present world population problems which lead in some regions to starvation and disease, tensions and wars. Whether the fuse of population growth has finally reached the charge of all demographic danger spots leading to international tensions and ultimate world explosion is a question that deserves to be examined.

Table 1 shows the growth of world population historically and the average annual rate of increase for different periods, and Table 2 gives the estimated population of the world by continents between 1800 and 1949.

TABLE 1
GROWTH OF WORLD POPULATION

Year	Estimated World Population in million	Annual per cent growth during preceding period
1650	545	—
1750	728	0.29
1800	906	0.44
1850	1,171	0.51
1900	1,608	0.63
1940	2,171	0.75
1949	2,378	—

the original state. Biologically, a cycle implies a series of changes regarded as leading back to its starting point. The life of man or that of any biological organism represents a cycle as it begins with birth and after passing through infancy, adolescence, adulthood and senescence, ends with death. Thus a cycle must be self-perpetuating and should be completed. As Professor Lull points out: "Several distinct stages are recognized in the career of any organism, certain of which constitute the life cycle. They are, briefly enumerated, the egg, embryo, adolescent, the adult, which in turn gives rise to the egg of a future generation. An additional stage, not always included is the senile, or that of old age, and the life of the individual is terminated, which, however, although a perfectly normal phenomenon, is not necessarily part of the life cycle and may occur at any stage of the organism's career. If death occurs before procreation is accomplished, the normal life cycle is not complete, for, as the name cycle implies, the full sequence of events is from egg to egg, or if the individual be a male, from egg to sperm".⁵ But it is obvious that the demographic cycle cannot be completed, for every culture will and does resist with all the force at its command the possible decline and eventual death of its people. No community or nation will ever voluntarily commit "race suicide". This is true despite the rise, growth, *decline and fall* of several historic civilizations.

However, if this concept of a "demographic cycle" is applied to the world as a whole, different countries cut the cycle at various stages, depending on the nature of the population growth of these countries. An empirical consideration of all the countries for which some kind of statistical information is available reveals five stages or phases of the demographic cycle which may be termed as (1) *high*

5. Richard Swann Lull, *Organic Evolution* (New York, 1947), pp 169-70.

cultural and industrial revolutions. Man's ability to produce, transport and save a surplus over current consumption for a future rainy day largely accounted for the fall in the death rate and the growth in the population. Famine, which has taken and continues to take such a heavy toll in some parts of the world throughout man's history, was thus largely avoided. Even after this, disease checked the growth of the population. But once man learnt the science of sanitation, the death rate was further cut down. With the gradual improvement in the exploitation and conservation of natural resources, man effected an improvement in the level of living. And with the discovery of new and competitive wants, man began to control the growth of his numbers in order to preserve and if possible to raise further his high standard of living.

In the more industrialized countries the margin between the birth and death rates began to narrow to such an extent that the population became almost stationary. And this stationary population becomes comparable with the stationary or slow growth of population in the pre-industrial days. The significant difference between the stationary state, or the slow growth of to-day and that of pre-industrial days lies in the present control of the birth rate. In the past, the population remained stationary because of the high and fluctuating death rate, but to-day the reason is not merely the definite decline in the death rate but, what is more important, man's deliberate control of the birth rate. This rough picture of the growth and decline of the population in the western industrialized world through the primitive, agrarian and industrial stages yields us the concept of the "demographic cycle".

It must be admitted that the word "cycle" borrowed from Biology is something of a misnomer when applied to demography and should not be taken literally. Generally, a cycle means a complete course of operations returning to

(1) *The high stationary phase* : The countries in this phase of development are marked by high birth rates and high death rates. Birth rates are invariably high, ranging between forty and fifty per thousand ; death rates approximate roughly to the birth rates and almost balance them. As a result, the growth of population is nil, and sometimes sporadic. The economy of these countries is basically agrarian and the agricultural population hovers near the Malthusian subsistence level. The increase of population, such as it may be, is conditioned by the incidence of famines, epidemics, floods and drought, which are frequent and rarely controlled. A good or a bad harvest depends on the abundance of rainfall or the absence of it ; the availability of pasture for livestock, uncontrolled cattle diseases, and similar factors, govern the fluctuating but not declining death rate. Man has no control over these phenomena, and births and deaths are merely unavoidable accidents.

It is easy to surmise that at one time the entire world must have been in this phase. But with the advent of the agricultural, industrial and commercial revolutions and the consequent improvement in the standard of living, certain western countries have left the other parts of the world behind in this original and undeveloped stage.

The countries that are now in this high stationary phase are Afghanistan, Arabia, China, Ethiopia, Indonesia, Persia, and parts of South America. The native peoples of the entire African continent are also at this stage. The most important country in this group is China.⁸ It is difficult to write about China's population problems with any authority, for the "authorities" themselves disagree within a large margin of more than a hundred millions, as to the very size of the population of China. No comprehensive census, in

⁸ A more detailed discussion of China's population problem can be found in the third chapter.

stationary; (2) *early expanding*; (3) *late expanding*; (4) *low stationary*, and (5) *declining*.⁶

To demarcate the various regions of the world under these five stages implies a knowledge of the birth rates, death rates and migration movements of all the peoples of the world. But the scanty and scrappy nature of such data for certain countries makes it difficult to list them as positively belonging to any one of the five stages. For instance, nothing definite can be said about the African continent (with the possible exception of the Union of South Africa (white population), Egypt and, perhaps, Abyssinia) for lack of even the most elementary statistical data.⁷ Wherever formal demographic data have not been available, circumstantial or environmental evidence such as the nature of a region's economy (agricultural, industrial or mixed), the stage of the arts, the availability — if any — and the scope of the health services, the self-sufficiency or otherwise of the total food supply in relation to the population needs, and other factors have been used to assign a particular region, perhaps arbitrarily, to one or the other of the five phases of the demographic cycle.

6. Various scholars have analysed the phases of the demographic cycle. See F. W. Notestein, "Population—the Long View" in Theodore W. Schultz (Ed) *Food for the World* (Chicago, 1945) pp. 36-57; Warren S. Thompson, *Population and Peace in the Pacific* (Chicago, 1946) pp. 26-35; P. K. Welpton, "World Population Trends" *Proceedings of the International Congress on Population and World Resources* (London, 1948) pp. 48-56, C. P. Blacker, "Stages in Population Growth" in *Eugenics Review* (London, 1948) pp. 88-102 Dr. Blacker's excellent analysis is adopted here.

7 Regarding this difficulty R. R. Kuczynski wrote, "Where no figures are available I can only deal with opinions. This is particularly inconvenient in a field where the opinions of even the most competent observers so frequently prove to be wrong. Many observers lack the necessary sense of figures. . . . To form a correct opinion on demographic matters without conclusive figures is well-nigh impossible because demographic facts are not obvious. To appraise fertility, morbidity, mortality or migrations is about as obvious . . . as appraising the frequency of adultery . . ."

China is not under 40 and my belief is that it will average at least as high as that recorded for Formosa (45.6) and possibly even higher. The data on the death rate are even less consistent than those on the birth rate but seem to justify the statement that the death rate seldom falls below 35 and then only under conditions quite exceptional in China, such as in a small area where there is some health work or in a "good" year when the harvest is abundant and epidemic disease is mild. The death rate in China is highly variable from year to year and from place to place. . . . This violent fluctuation, much more violent than the fluctuation in birth rates, is probably characteristic of all populations which, like that of China, have practically no health service and live close to the subsistence level, even in "good" years".¹⁰

The countries that come within this phase present problems of future expansion when modern public health services and measures for combating famine by increased production and industrialization are introduced. Most of Africa, China including Manchuria, Tibet, Saudi Arabia, Iran and Afghanistan figure in this phase of development.

(2) The second phase — that of *early expanding* — is marked by high birth rates (as in the first phase) and lower and declining death rates. It is the difference between this declining death rate and the high birth rate that gives these countries large net increases of population. The birth rates and death rates range around 40 and 25 per thousand respectively.

The economic systems of the countries in this phase are characterized by improved agricultural methods, with the introduction of irrigation facilities and flood control measures. Better seeds, natural and chemical fertilizers, crop rotation and storage facilities increase agricultural

10. Warren S. Thompson *op. cit.* p. 180-181.

the modern sense of the term, of the whole of China has ever been taken. Nor are the available statistics about her birth and death rates adequate in any sense. Even the estimates of her total population have, as already observed, a margin of error of more than a hundred millions. There is no strong central government pending the consolidation of power by the Communists. Communications are poor and health services in major areas are almost absent. Foreign aggression and civil war have periodically exhausted the country, and famine is not an occasional occurrence but a chronic feature of the countryside. For instance, the special Red Cross Commission that went to China during the great famine of 1928-29 to discover whether there was an appropriate field there for Red Cross aid, pointed out in their report that the Red Cross was organized for relief in *emergencies*, and that in China famine is not an emergency! The Commission, after exploring various possible solutions, (including emigration), for the Chinese population problem, observed, "If other nations open wide their doors to Chinese emigrants, and if all the ships engaged in inter-continental passenger traffic on the seven seas were withdrawn from their usual routes and devoted themselves henceforth solely to transporting Chinese from their native land to other countries, it is believed that they could not keep pace with the year by year increase of population".⁹ In a word, China presents a population problem which defies solution by any ordinarily available means. The general conclusion of the Commission was negative. It is difficult to be optimistic in the absence of reliable information.

Dr. Warren S. Thompson, who estimates the population of China at somewhere between 375 and 425 millions, writes: "It seems reasonably certain that the birth rate in

9. China International Famine Relief Commission. *Annual Report* (1929).

influence), Egypt in Africa, and all the Middle Eastern countries with the exception of Iran, Arabia and Afghanistan which belong, as already observed, to the first phase ; that is, almost the entire continent of Asia with the exceptions noted. The impact, in the better sense of the term, of the West on Asia coupled with the Asian mores that favour growth of population, has resulted in a huge increase in Asia's population in the last half century. For instance, the population of India (and Pakistan) alone increased by fifty millions in the decade 1931-41. Other Asian countries have registered comparable increases. This is not because the rate of growth of Asian population has been very remarkable. A modest rate of increase has meant a huge addition, because of the massive size of the population. This tremendous growth will constitute a grave problem for Asia and the world, once the entire continent regains complete political freedom and stability, improves and modernizes its public health and sanitation, and progressively cuts down its death rate. And if the birth rate continues at the present level, the only result will be a demand to overflow into certain nearby regions which have never received, and still refuse to receive, Asian immigrants. Whatever be the resistance of the "receiving" countries, an attempt will be made to change, perhaps forcibly as Japan did recently, the political and economic *status quo* in the Pacific.

Besides these countries in Asia, this same phase of population change prevails in Turkey, Egypt, Israel (Jewish population), Madagascar, Mexico, Central America and all the Republics of Latin America, with the exception of Chile, Uruguay and Argentine. The economies and the formal demographic features of these countries are more or less similar to the predominantly agrarian economy of Asia, though the growth of towns and urbanization has been relatively greater than in Asia.

production and enable the farmer to save what little surplus he can for a lean day. Slight industrialization has also begun with a nominal survey of the region's mineral resources and the harnessing of quasi-modern machinery. A small fragment of the labour force is technically trained to man the few scattered industrial establishments. Transportation by road, rail and water is improved to facilitate the movement of food to areas of scarcity, alleviating the rigours of regional famines. The beginnings of public sanitation and health services appear, and combat the forces of disease and epidemics sufficiently to decrease the high death rate. A network of schools, although inadequate to the needs of the total population, makes inroads into the tremendous illiteracy of the population in these areas. A relatively strong central government and a police force banish insecurity and civil strife enabling the people to enjoy a measure of peace. All these elementary decencies of civilized existence were made possible by contact with the West, in the shape of European imperialism over a major part of Asia. The loss of political freedom and some grave economic disadvantages for these countries are balanced against the gain of such amenities as have been described. The net result of this balance sheet of Western European rule over Asia, for our purpose, is the large and significant increase in the population of all these countries. These are mainly former colonial areas which are fast regaining their lost political freedom, and hence, they are on the eve of great political and economic development.

The countries within this phase of population change are India, Pakistan, Burma, Ceylon and Malaya (all formerly under British influence, except for Malaya whose status is still a colonial one), free Thailand, Indo-China (under waning French influence), Indonesia (formerly under Dutch rule), Formosa and Korea (formerly under Japanese

general, with one or two exceptions, may be described as the backward of the advanced countries in the demographic sense, where some preventible wastage of human resources still occurs. They are, in order of importance, the Soviet Union, Japan, Argentina, Poland, Bulgaria, Roumania, Yugoslavia, Italy, Spain, Chile and Uruguay. The problem in these countries is largely the conflict between political and religious ideologies on the one hand, and the needs of demographic stability on the other. When the State and Church are of one view, it is always in the direction of increasing the country's population. And even when the Church has no influence with or over the State, the political demand for a large population is always there and is reflected in an unconscious, if not a deliberate, expansionist population policy.

The most important, and the largest, country in the above group is the Soviet Union whose population increased from 147 millions in 1926 to 170 millions in 1939 and 189 millions in 1945. Further growth is expected and it will probably exceed the 203 million mark by 1950, if the present rates of fertility and mortality continue.¹¹ The next most important country is Japan, which is more advanced than Russia in the late expanding phase. Japan is also important because she is the only country in Asia (if we exclude the Soviet Union) to reach this phase. In Japan we have fairly reliable census figures from the beginning of the Tokugawa period. Between 1721, the year of the first Tokugawa Census, and 1850, the year of the last, the population of Japan remained more or less stationary around 30 millions. This was the period of Japan's enforced isolation and pre-industrial and pre-machinery agrarian economy. The population remained relatively constant at a low level as a

11. Frank W. Notestein et al. *The Future Population of Europe and the Soviet Union* (Geneva, 1944) p. 42

In fact, Latin America in general (by which is meant all the region in the Western Hemisphere south of the United States), with a population of 146 millions in 1946, has shown an enormous capacity to increase. The Latin American population (if we include the entire region) has been growing faster than that of any other major region in the world. For instance, during the two decades between 1920 and 1940, the Latin American population registered an annual rate of increase of 1.73 per cent, adding about 40 million people or about 41 per cent to its numbers. If the present rate of growth continues, the population will double itself by 1986. By the year 2000 the population may exceed 370 millions. But despite this great present rate of increase and the latent possibilities of increase, it must be remembered that to-day the whole of Latin America comprises 16 per cent of the world's habitable area, yet has only 6 per cent of the world's total population.

(3) The *third phase* of the demographic cycle — *late expanding* — is characterized by declining birth rates and death rates. As the death rates are consistently lower than the birth rates, a net population increase is registered every year. The countries which come within this phase have birth rates ranging between 30 and 35 per 1000, and death rates around 20 per 1000. The very decline in the birth rate is an index of their advancement. The economy of these countries is based on relatively advanced agriculture and modern industry. Industrialization has brought with it urban patterns of living accompanied by modern sanitation and public health services. Religious prejudices and expansionist political ideologies — mainly the desire of the Catholic Church and of the Soviet Union for an increase of population—account for the relatively high birth rates, especially in the rural areas where the country's socio-religious and perhaps "political" mores still hold sway, and in the towns where Marxist influence is considerable. These countries in

her economy, (particularly the loss of her foreign trade), all unaccompanied by any significant change for the better in her demographic situation, have not solved her problem in the sense of relieving her "felt population pressure". Her military defeat, involving the loss of some thousands of lives, has not solved her basic economic problems ; it has only forcibly removed one of the results of the fundamental demographic difficulty she experienced in finding colonial space. The Allied Powers have done nothing to make Japan less of a demographic danger spot. The available evidence does not show any marked deviation at present from her pre-war fertility and mortality rates.

The Soviet Union is in a somewhat similar position, except that she has land where her increasing numbers can migrate and settle, though the capacity of such sparsely settled land to support growing numbers at an increasingly high standard of living is doubtful. The Soviet Union may have to choose between raising the level of living for her present population through increased production or further lowering the present relatively low standard of living of her people by further increasing her population. The prospects of receiving enough large-scale economic gain from her ideologically-bound satellite empire to raise her standard of living seem doubtful.

(4) The *fourth phase* of the demographic cycle is more advanced and involves less wastage of human resources. This *low stationary phase* is marked by low birth and death rates. Births and deaths roughly cancel each other out and the population is kept stationary. If immigration and emigration are ignored, all that can be said about countries in this phase of development is that the population is apt to remain at a stationary phase for a short period if other factors remain the same. If the age pyramid of such a population is not examined in its component parts, it may

result of famine, epidemics, abortion and infanticide. With the Meiji Restoration of 1868 and the development of an international outlook, modernization, industrialization and urbanization, the population grew apace, leaving far behind, the population that had subsisted on an agrarian economy under feudalism. As a result, the population doubled in fifty years, between 1870 and 1920. From 1920 the total population again increased from 55 (55,963,000) millions to 73 (73,114,000) millions in 1940, an increase of 31 per cent in two decades. And by 1950 Japan's population has increased to over 81 millions.

With the increase in industrialization and the accompanying urbanization, the population increased at first, as was to be expected. But when urban patterns of living came to stay as a permanent feature of Japanese economy, the birth rate tended to fall, though the rural birth rate continued to be high. Though only 40 per cent of the Japanese population depended upon agriculture for a livelihood, the population continued to grow. Japan's urbanization and industrialization, her intensified and mechanized agriculture, her emigration and colonization, and her attempt to capture world markets did not keep pace with the desire for a higher standard of living that was born of her contact with the outside world. The economic distress arising out of this demographic disequilibrium between the size of her population and the resources available for its support at an ever rising level of living, added to a militarist and aggressively nationalist government which tried to boost the birth rate, resulted in the attack on Pearl Harbour in 1941. It must be admitted that the pressure of Japan's population was, with other factors, responsible for her recent aggression. Japan's defeat, her loss of Manchuria, Korea and Formosa, and the disorganization of

TABLE 3

COUNTRIES WITH NET REPRODUCTIVE RATE ABOVE AND BELOW UNITY

Country	Year	Net Reproductive Rate
U.S.A.	1937	0.96
	1942	1.18
Great Britain	1937	0.78
	1944	0.93
France	1939	0.90
Belgium	1939	0.85
	1941	0.67
Denmark	1937	0.94
	1943	1.14
Germany	1940	0.97
Austria	1939	1.0
Hungary	1938	1.0
Czechoslovakia	1929-32	0.94
Norway	1939	0.85
Sweden	1941	0.84
Switzerland	1938	0.77
	1943	1.05
Australia	1937	0.98
	1943	1.16
New Zealand	1937	0.99
	1943	1.2
Estonia	1938	0.79
Finland	1938	0.96
Latvia	1939	0.90

The above countries are in western, northern and parts of central Europe ; the countries in this phase outside Europe are the United States of America, Australia and New Zealand. It is significant that no country in Asia, Africa or South America comes within this phase.¹³

13. It is true that for most countries in these continents the statistics necessary for calculating the net reproductive rate are not available. But the fact that their populations are growing fast shows that their net reproductive rate is considerably higher than unity.

be broadly concluded that the population will become an older population, that is, the older age group, as compared with the younger and middle-aged groups, will be proportionally larger in the total population. But for the purpose of estimating the trend of population in the long run, the simple birth and death rates are not of much use. If the small differences between birth and death rates are ignored, the only way of estimating whether a country's population is growing or remaining stationary or declining, is to use the net reproductive rate.¹² When the net reproductive rate stands at unity or 1.0, the population will replace itself, and if it is below unity or 1.0, the population will not replace itself and will therefore decline. Not every country has the data necessary for calculating the net reproductive rate. But an advanced country is more likely to have such statistics as will enable the net reproductive rate, within a margin of error, to be calculated. And those countries where the rate is around unity or 1.0, that is, where the population is neither increasing nor declining, can be grouped under this low stationary phase. The net reproductive rate of the following countries is around unity or 1.0; some countries are below and some are above unity or 1.0. Tested by this index, these countries can be grouped under the low stationary phase.

12. This well-known concept of Net Reproductive Rate may be defined as the average number of daughters that would be borne per female among a cohort of females starting life together and subjected to given schedules of age-specific fertility and mortality rates. Thus, if the survivors of 1000 newly-born females give birth to 750 daughters, the net reproduction rate is 0.75 (the average number of daughters per female in the original cohort). The net reproductive rate may also be described as an index of the "self-replacement" potentiality of a population with given age-specific rates of fertility and mortality. Thus a net reproduction rate of 0.75 is 25 per cent below the requirements for "self-replacement" of the population on a permanent basis. With a net reproduction rate of 1.0 a population is said to be exactly reproducing itself on a permanent basis. H. P. Fairchild (Ed.) *Dictionary of Sociology* (New York, 1944) p. 250.

The eventual extinction of a people or "race" completes the demographic cycle, though the disappearance of certain peoples (who have hardly gone through all the phases of the demographic cycle) need not necessarily constitute an example of this phenomenon. Dr. Blacker, discussing the countries that come within this phase of the demographic cycle, observes, "The depopulation of certain islands, such as Tasmania, where none of the original native inhabitants survive, or the Tropical Oceania where they have been much reduced ; or the disappearance of native races from areas of a continent, as the North American Indians have disappeared from many of their original hunting grounds, are to be counted rather as a reaction to the spread over the globe of the white man than as an autonomous phase in a demographic cycle. In recent times, France is the only country which has experienced an actual excess of deaths over births for more than a momentary period ; and there are signs that, perhaps, as a result of very energetic measures taken since the end of the second World War, this trend is being reversed."¹⁴

The following tables, Nos. 4 and 5, give France's birth and death rates and the Gross and Net Reproduction Rates from 1910-11 to recent times. The figures reveal that for nearly ten years, between 1936-1946, the French death rate has actually exceeded the birth rate. And the net reproduction rate has been less than unity for the same period. All this, however, has been changed by the vigorous measures taken by France after the second World War, through various social security measures of economic assistance to mothers and parents of large families. As a result of the war, France has become very population conscious and has also realized that in a country like France babies cannot be had at bargain prices. The resulting post-war population policy has already

14. C. P. Blacker *op cit.*

These countries present no problems for the present. If the population in these countries does not increase in the future, either through natural increase or through immigration, they, with their relatively "empty spaces" will present an unhappy contrast to those countries which are expanding despite great demographic wastage. For instance, if Australia's population should cease to increase appreciably in the next ten years and if the population of Japan, China and India, and South East Asia generally, should continue to grow as they have grown in the past half-century, the lack of balance between area and natural resources on the one hand and the population numbers on the other, will lead sooner or later to some effort, violent or non-violent, on the part of the have-nots, to change the *status quo* in the Pacific and perhaps in the Americas. Whether such efforts would succeed or not is not the question. The world, if it wants to maintain peace, must prevent the root causes of such attempts leading to war. Recent history in Europe and the Far East provides ample evidence that such violent attempts to change the *status quo* will not be discouraged by threats that such efforts are bound to fail. In every conflict both parties hope to win. The fact that one party is bound to lose in the end does not occur to either of the parties. Otherwise wars would never be waged. The alternative is perhaps peaceful change through economic and technical assistance, apart from planned inter-Asian migration.

(5) The *fifth* and last phase of the demographic cycle is the *declining phase*. This phase is marked by an actual decline in the total population of a country through an excess of deaths over births. This situation arises not so much out of an excessively high death rate as out of an excessively low birth rate. When this declining trend is not momentary and tends to be permanent, the question of "race suicide" arises. The only way to alter this situation, apart from increasing the birth rate, is through a large volume of immigration.

TABLE 4
BIRTH AND DEATH RATES OF FRANCE¹⁵

Period or Year	Birth Rates	Death Rates
1911-13	18.1	19.0
1921-25	19.3	17.2
1926-30	18.2	16.8
1931-35	16.5	15.7
1936	15.0	15.3
1937	14.7	15.0
1938	14.6	15.4
1939	14.6	15.5
1940	13.4	18.4
1941	13.0	17.4
1942	14.5	16.9
1943	15.9	16.4

TABLE 5
GROSS AND NET REPRODUCTION RATES IN FRANCE OVER
VARIOUS PERIODS

Period or Year	Gross R.R.	Net R.R.
1901-05	1.37	0.98
1906-10	1.27	0.95
1911-15	1.10	0.84
1916-20	1.80	0.59
1921-25	1.18	0.95
1926-30	1.12	0.92
1931-35	1.06	0.90
1935	1.00	0.87
1936	1.01	0.88
1937	1.02	0.89
1938	1.04	0.91
1939	1.06	0.93
1940	0.97	0.82
1941	0.90	0.77
1942	0.98	0.85

15. *Statistical Yearbook of the League of Nations*, (Geneva, 1945).

borne fruit in a relatively marked excess of births over deaths. With the new social security regulations whereby parents are not only not penalised through increased economic burdens but are instead modestly rewarded for having babies, the population may continue to increase. When such an increasing trend is permanently established, France will move into the fourth phase of the demographic cycle.

Thus the demographic cycle, from the point of view of the total world population at any one fixed period of time, cuts across various countries at different stages of their demographic evolution. Thus different countries belong to different phases of the demographic cycle. From this point of view, China, for example, as we have already pointed out, belongs to the first phase, and so on.

The demographic cycle can be viewed also from the point of view of the socio-economic history of any one country. From this view point, the demographic history of any advanced country can be traced through almost all the stages of the cycle. Great Britain, for example, was in the first phase before the advent of the Agricultural and Industrial Revolutions. With the advance of medicine and sanitation and rising standards of living sustained by overseas emigration and colonial exploitation, she moved into the second and subsequent phases and has finally reached the present low equilibrium level. A slide into the last phase is prevented by intense propaganda to maintain at least replacement levels of population and social security measures to make child bearing and rearing less of an economic burden.

Thus the first point of view presents a static and a photographic view, whereas the second gives a dynamic and cinematographic view. While the first view is synoptic the second is more particularized and spotlights one country or region and its demographic history.

aboriginal population, or the white Americans and the Indians on the American continent. Besides these, this situation covers a wide variety of human contacts like the relations between the whites and the Negroes in the United States, whites and Negroes in all the European colonies in Africa, the Arabs and the Jews in Israel (Palestine) and the Middle East generally (and in other countries where the so-called "Jewish problem" exists), the caste Hindus and the "untouchables", the Hindus and the Moslems in India and in Pakistan, Chinese, Indians and Malays in Malaya, the Fijians and Indians in Fiji, and so on. Then, there are countries where twin groups live side by side and get along though they are not particularly fond of each other. In this case there is no question of open and outrageous discrimination by one dominant group like the whites against the Negroes, as in the United States and South Africa. The French Canadians and the British Canadians, the Walloons and the Flemings in Belgium, the Boers and the Britons in South Africa, the Brahmin and non-Brahmin Hindus in South India are examples of this situation. In fact, there are latent tensions in every community and country where differential cultural levels exist and where complete homogeneity is absent. The tensions are always there, often close to the surface, though they may not always seek violent outlets. And tensions such as these have their basic origin in demographic disharmonies.

From the synoptic point of view, these five phases of the demographic cycle give us the present position and future prospects of the population of various countries and the tensions inherent in such a position and prospect for the future. Apart from international tensions, there are intra-national tensions as well. These tensions within various nations between groups and communities arise as a result of what may be called "population maladjustments", and can be considered as a special phase of the overall demographic situation. This situation arises when more than one ethnic, cultural, linguistic or religious group or a group aspiring to a separate "national" status of different, if not always conflicting, mores meet and live in the same geographical area under a common sovereignty. The tensions between such communities among the permanent elements of a country's population give rise to what are popularly called minority problems. But in this special phase there is more than what is commonly understood by minority problems because of differential birth and death rates, and the differences in economic, social and intellectual development between various groups. These intra-national tensions leading to various types of denials, discriminations, segregation, persecutions, riots, civil war and genocide are as important as international tensions leading to war, and deserve consideration in any plan to make world peace a permanent possibility.

This situation, present in most countries in different degrees of intensity, must be treated as a special phase of the demographic maladjustment discussed earlier, as it cuts across countries which have heterogeneous populations. This is a large "tension area", and as implied in the above description, it is not confined to the demographic consequences of European contact with "primitive" peoples, as between the Europeans and the Natives of South Africa, or the contact between white Australians and the indigenous

TABLE 6
TOTAL POPULATION AND AREA BY CONTINENTS

Continent (or country)	Total population in 1947 midyear	Total population in 1949	Total area in sq. kilometers	Total area in sq. miles	Density per sq. mile
Africa	.. 184,203,000	198,000,000	30,300,000	11,699,000	·05
America	.. 310,068,000	321,000,000	40,400,000	15,515,000	25·1
North America	.. 206,531,000	213,800,000	19,662,000	7,592,000	18·9
South America	.. 103,537,000	106,200,000	17,960,000	7,923,000	16·8
Asia (excluding U.S.S.R.)	.. 1,235,492,000	1,254,000,000	28,800,000	10,348,000	111·5
Europe (excluding U.S.S.R.)	.. 384,890,000	393,000,000	5,420,000	2,079,000	193·4
U.S.S.R.	.. 173,788,000 ¹	200,000,000	21,176,000	8,500,000	21·0
Oceania	.. 11,901,000	12,400,000	8,550,000	8,176,000	1·5
Total World	.. 2,200,342,000	2,377,400,000	132,700,000	51,118,000	42·5

1. In 1940.

CHAPTER II

WORLD DEMOGRAPHIC DISEQUILIBRIUM

The two most disturbing facts about world population to-day, apart from its tremendous growth, are the unevenness of its distribution and the unevenness of its growth. When these startling facts are related to the distribution of natural resources between various countries and the means available for the support of their populations, the existing political and economic uneasiness, if not unrest among nations, becomes evident. Therefore, the relation between this whole set of socio-economic facts and the existing and potential politico-economic tensions which have led in the past, and may again lead in the future, to aggression and war, deserves to be examined.

The following table on page 47 summarizes the total area and population of the various continents.

The most significant and startling fact emerging from the above table is that more than half of the world's population is cribbed, cabined and confined in about 1/20th of the total land area at an average density of 400 persons per square mile. A closer analysis (see map) reveals that the most densely populated areas of the world are China, India, Pakistan, Europe, Japan and Indonesia. In contrast, vast territories having thinly settled populations are situated mainly in the central regions of the continents and are therefore some distance from the ocean. These thinly populated areas include Siberia, parts of Central Africa and South America, the Central and Northern parts of North America, parts of Australia and many islands in the Pacific. While mere area in square miles and crude density of population

empty areas are under the control of peoples who do not desperately need them. In some cases, the people who control them are unable to fill these lands, while the people who need them and can fill them are denied access to them. The paradox of millions of square miles of unused, and potential farm land scattered about the earth in the face of terrible regional overpopulation in the world can only be explained in terms of the historical and political *accidents*, involving no small amount of aggression, that gave the possession of certain lands to certain peoples, and their consequent title to present ownership and national sovereignty. This global differential becomes an anomaly as the world gets increasingly reduced from a vast globe of great distances to one of a small interdependent planetary unit. Since some men and nations would rather go to war, kill millions of human beings and destroy billions worth of property than accommodate their neighbours or yield an inch of their, perhaps never-to-be-used, soil, our society must make an attempt to effect a peaceful change of the *status quo*, if it is to survive in the long run. And the sooner the need for such a change, assuring a better and juster distribution of the world's land and its resources, is realized, the better will it be for all concerned. The periodic attempts of some countries to change the political and economic *status quo* as well as the defence of the existing order by the privileged countries have led to no lasting solution beyond periodically disturbing international peace at the cost of enormous suffering and treasure. The international population-resource differential may lead to wars again. The fact that such wars seldom succeed either in solving the population problems or in changing the *status quo* is no argument to deter an attempt on the part of some nation to remove the supposed basic factors that lead to such wars. The only alternative perhaps is peaceful change and it is imperative that such change is effected while there is yet time.

per square mile need certain modifications before they can reveal the real ability of a country to support a certain number of people at a given level of living, it is obvious that the uneven distribution of the population in relation to land area and its inherent resources presents a formidable problem of economic differential with all its attendant international strains and tensions.

The fact that a country or a continent supports a certain number of people at a particular level of living is sometimes thought to be in itself a measure of that country's total carrying capacity. Were this true, all empty lands would have been filled and no (marginal) land would have been left, and consequently there would be no question of over- and under-population.

The fact, however, is that populations in various countries are not growing according to the availability of land resources; on the contrary in some countries they are decreasing inspite of abundant land resources. Though a family considered alone may and often does plan its size according to its economic resources, a nation (though composed of families) seldom grows or declines because of the thought of the limited available resources for its support. There are countries like Canada or Australia or Brazil which can maintain considerably more people without lowering their present standard of living, while there are regions in the Pacific and Latin America where the standards of living can definitely be raised by increased population and yet the population does not respond to the available resources. The contrary is truer; the population in countries like India or China, Indonesia or Puerto Rico grows without reference to the available land resources. Taking the facts of population and land resources as they are, we can do little to prevent the existence of people already born; we find terribly overcrowded regions and empty spaces scattered almost side by side all over the world. These

could be noticed in Western and Northern European countries with a high standard of living even before the beginning of the present century. And it is from *this* region of declining population that "receiving" countries are most anxious to have immigrants. Even the populations of Southern and Eastern Europe are not growing rapidly, for their rate of natural increase has fallen significantly in recent years. Dr. Julius Isaac, discussing the possibility of population growth in Eastern and Southern Europe with a view to sending out a large number of emigrants, observes: "Before the outbreak of the 1939 war, it seemed probable that the agricultural States of Eastern and South Eastern Europe—the main source of the "new" emigration since about 1880—might in the near future expect a large natural increase in population, in spite of their falling gross reproduction rate, from a fall in the death rate due to a steady improvement in social conditions and health services. As the population in these countries has been and still is extremely hard hit by the devastation of the war, these expectations will scarcely materialize soon after the war. It may, therefore, be safely assumed that a change in mortality will not significantly alter the prospect of population decline in Europe".²

What are the chances of the wartime rising trend of Europe's population becoming permanent? It is true that in the years before and during the second World War birth rates and net reproductive rates revealed a rising trend. But this rise seems to be due to temporary factors like higher marriage frequency—mostly soldiers' marriages—and the overall evidence shows that post-war Europe is not giving up the one-or-two child family habit. Even a vigorous pronatalist policy like that pursued by post-war France cannot be expected to increase the French population to any great

2. Julius Isaac, *Economics of Migration* (London, 1947) pp. 80-81.

In the meanwhile, the people who are most crowded and who are desperately land hungry are not decreasing in numbers. There is nothing strange in this behaviour, for they are going through a phase of the demographic cycle that other peoples have gone through at an earlier period. It is the people who have or control more land than they can use or hope to use that are relatively stationary or declining in numbers. Despite high death rates due to a lack of modern and widespread health and social services, the overcrowded people are expanding in contrast to the thinly settled people who are relatively either stationary or even declining in spite of their low death rates arising out of better nutrition, modern sanitation and public hygiene. Were the European population growing to-day at the rate at which it grew during most of the nineteenth century, Asian uneasiness at the sight of unutilized empty lands might be removed by the belief that these areas would be populated by Europeans at some near future date. But there is no evidence for such belief. The European population is to-day increasing, but at nothing like the rate at which it increased from say 1650 to 1900. According to Dr. W. F. Wilcox, the population of Europe (excluding Russia) increased by 42 per cent in the first half and by 50 per cent in the second half of the nineteenth century. This tremendous growth began roughly about the middle of the seventeenth century. It is estimated that the increase for the century between 1650-1750 was 40 per cent, that from 1750 to 1800 about 33 per cent and from 1800 to 1900, 53 per cent and from 1900 to 1949, 36 per cent. Europe's population, in all probability, may never again register such an unprecedented growth.

The decline in the rate of growth received a slight check during the second World War and this must be interpreted only as a temporary wartime trend. The rate of increase in post-war Europe as a whole is, however, constantly falling. This declining tendency

As Dr. F. W. Notestein and his collaborators point out: "Even without any further decline in fertility, the natural increase of most European countries will go down in the next decade or two, owing to the aging of the population, which results in more deaths and fewer births, with an orderly continuation of recent fertility and mortality trends in the future. Europe would have reached a maximum population of 421 million about 1960, and from then on would have declined at an accelerating pace.

"The projections indicate a relatively constant population of about 420 million for Europe, to be reached about 1955 and to continue at least to 1970. Under the assumptions made, the European population will vary less than 2 per cent from 420 million in this fifteen year period. That Europe should reach an end to rapid population growth was a foregone conclusion. No continent can continue indefinitely to increase at the rate that Europe was growing in the modern era".⁴

The following table based on the projections referred to above reveals the possible trends of growth.

TABLE 7
POPULATION PROJECTIONS FOR EUROPE AND THE U.S.S.R.
AT TEN YEAR INTERVALS, 1940-1970⁵
(IN THOUSANDS)

Region	1940	1950	1960	1970
Europe & the U.S.S.R.	572,000	618,000	650,000	668,000
Europe (excl U.S.S.R.)	399,000	415,000	421,000	417,000
North Western & Central Europe	234,000	237,000	234,000	225,000
West Central Europe	163,000	166,000	165,000	159,000
Northern Europe	20,100	20,500	20,300	19,500
Southern & Eastern Europe	165,000	177,000	187,000	192,000
U.S.S.R.	174,000	203,000	228,000	251,000

4. F. W. Notestein *et al.*, *The Future Population of Europe and the Soviet Union*, (Geneva, 1944) p. 46.

5. Condensed from F. W. Notestein *et al.*, *op. cit.* p. 56.

extent. It will stop an actual excess of deaths over births, but it may not significantly increase the population. Available evidence on the age structure of Europe's population reveals that at best the net reproductive rate will approximate to unity but never exceed it, as it did some fifty years ago. In brief, the characteristic trend of post-war Europe's population can be summarized in words of the League of Nations Yearbook: "While the nineteenth century was a period of rapid population increase due to reduced mortality, future years in many countries threaten to be a period of population decline due to reduced fertility."³ There is, of course, no question of a whole-scale depopulation of Europe. On the contrary, European countries are not apt to sit back and contemplate their own extinction. To every nation the best culture in the world is its own and, therefore, worth preserving; and that means each country would strive for a population of such an age structure as, at least, to replace itself. Already France has reversed the declining trend, though the balance of births over deaths is not significant enough to affect the main thesis of this study. And Europe knows only too well that any race for population increase based on nationalistic and totalitarian ideals is bound to fail eventually, for any such policy would certainly result in lower levels of living, apart from the fact that, at the beginning, it is the wrong end of the social scale that multiplies itself. Even the population of Southern and Eastern Europe, which is bound to grow, may never again register the rate of growth achieved by the European people as a whole in the nineteenth century. While there will certainly be no "race suicide" in Europe in any foreseeable future, there will also be no growth large enough to demand emigration outlets. Such demand as there may be will probably be for political, religious or "racial" reasons, and not fundamentally for economic or spatial reasons.

3. *League of Nations Yearbook* 1938-39, (Geneva, 1940) p. 154.

are not unlike the stages of infancy, adolescence, maturity and senescence that a human being passes through. And this population that is levelling off, finds itself master, proprietor, owner or controller of the major portion of the earth's area, an area that it can hardly hope to fill in the near future. The population of Europe, which, with the advent of the industrial revolution, overflowed into the new world and Australasia, warring and conquering, subjugating and colonizing, now finds itself slowing down in all the places where it settled. The population of Southern and Eastern Asia which remained almost stationary for centuries (and the origin and existence of this population date back to a much earlier period) through tremendous human wastage, has now begun to overflow. But although there are no more New Worlds to discover, conquer or colonize, it cannot be confined to its present geographical limits as long as there are empty spaces around the world. The potentialities of this population in this particular demographic phase are such that they may not respect the fact that these empty spaces have titular owners, controllers or proprietors.

Table on page 56 gives a rough idea of the most conspicuous of the full and empty lands. This does not include Africa as a whole for want of reliable and detailed statistics ; moreover much of the area in Africa is Dependent Territory. For the same reason, certain thickly-populated regions of the Pacific have not been included. But more of this later.

If available arable land area and density per square mile are adopted as criteria of relative over-population, it is found that some European countries are as over-populated as some Asian countries. This comparison must, of course, be modified in the light of the advanced economic-industrial structure of Europe as against the pre-machine rural economy of the Asian countries. Therefore, the problems of thickly-populated European countries are different from

With the passage of time, this trend will, if anything, widen the gulf between the empty and full lands, leading to impressive differences between per capita resources, land area and international levels of living.

What are the chances of reducing these international population growth differentials? It looks as though nothing very substantial can be done to reduce the growing population, for all this growth and decline seem to be part of the demographic cycle, and a cycle must go through its full revolution under normal circumstances. Of the total world population, about 62 per cent belong to the High Stationary and Early Expanding phases of the demographic cycle. This means that a major segment of the world's population is in for a great potential increase. Quantitative aspects of population problems cannot be changed overnight. Arresting the growth of a population in this phase will be as difficult as preventing the arrival of children to a healthy young couple, unless, of course, the necessary precautions are taken. Such precautions cannot be applied to or forced upon a huge population even in a totalitarian state. And, even if forced, there would be no immediate results. To repeat, it is this expanding population that is confined in a small and severely restricted area of the globe. The remaining 38 per cent of the world population, belonging to the Late Expanding, Low Stationary and Declining phases of the demographic cycle, sprawls across the rest of the global area. This population had its turn of increase, and it was a tremendous increase; and now it cannot be cajoled into multiplying just because it has more land at its disposal than it can use. To make this population multiply through any philo-progenitive population policies, as was attempted by Hitler's Germany, would be as unnatural as expecting an old couple to have many children. Anyway, such policies will yield no significant results. It appears that populations passing through different phases of the demographic cycle

THE WORLD — DENSITY OF POPULATION

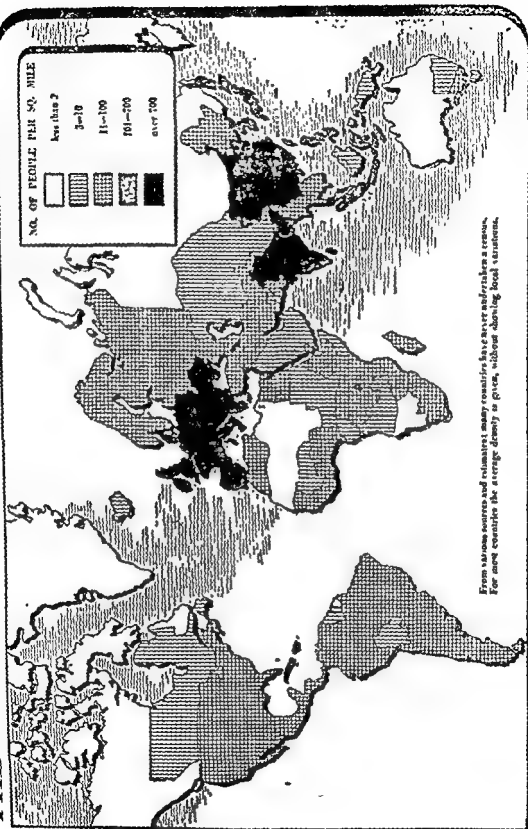


TABLE 8

DENSITIES OF CERTAIN "FULL" AND "EMPTY" LANDS

"Full" Lands			"Empty" Lands		
	Year	Density per square mile		Year	Density per square mile
1. Belgium	1947	726	1. Australia	1949	2
2. Holland	1945	717	2. Canada	1941	3
3. United Kingdom	1947	534	3. Siberia	1941	5
4. Italy	1945	397	4. Argentina	1945	5.8
5. Germany	1947	408	5. Africa	1949	.05
6. Japan	1940	496	6. Brazil	1940	13
7. China	1939	105	7. Latin America	1947	.28
8. India	1947	261	8. New Zealand	1947	4.5
9. Indonesia	1947	88	9. United States	1941	41

those of the overcrowded Asian countries. Firstly, the economic organization involving the import of raw materials and food and the export of manufactured goods so characteristic of European countries is the very opposite of the economy of most Asian countries. Secondly, people from all these over-populated European countries can easily emigrate to regions colonized and settled by their daughter or quasi-daughter communities. The British, the Italians and the Dutch can emigrate to the British Dominions and the United States, as indeed they have done in large numbers in the last century. Thirdly, these countries have colonies which they have exploited ruthlessly in the past and continue to exploit for their own benefit, though this source of relief may not last long, for it will be increasingly difficult to retain these colonial areas in the future with any show of authority or force. The difference between colonised and permanently-settled communities like Australia, Canada and New Zealand on the one hand, and colonial

source of relief to the overcrowded millions of continental South East Asia. And it is this whole region that constitutes the current demographic danger spot, in the sense of containing expanding but frustrated peoples casting longing eyes on areas relatively unsettled or settled very thinly. It is to this unbalance in the distribution of people, land and resources in this particular region that present and potential international tensions must be traced. If, therefore, we eliminate those overcrowded European countries since they can obtain relief in many of the thinly settled "white" countries, the area of "full" lands and "empty" lands can be reduced to the following table :

TABLE 9
PROBLEMATIC "FULL" AND "EMPTY" LANDS AND
THEIR DENSITIES

"Full" Lands	Density per square mile	"Empty" Lands	Density per square mile
Japan	496	New Guinea (overall)	4.0
		Dutch New Guinea	2.3
China	105	Australian New Guinea	6.3
India	261	Papua (Australian)	3.7
		Borneo	8.5
Indonesia	88	Tropical Africa	11.5
South East Asia	256	Tropical Latin America	10.2

The thinly settled lands like Australia, New Zealand, Brazil and Canada are not shown in the above table, as these countries are not willing to receive any large number of Asian immigrants. The objections of these countries to open their doors to Asian immigrants on equal terms with Europeans are neither rational nor logical. But these time-honoured objections will be examined later, for it is they which are largely responsible for demographic international tensions.

possessions on the other hand, where colonization is difficult for climatic reasons, as in Africa or Borneo, is obvious.

Fifthly, no country with a high standard and Western pattern of living, to which Europeans would like to emigrate, debars their entry. There may be a limit to the numbers admitted, as for instance under the American quota system, or some receiving countries, like Australia, may prefer British immigrants to other Europeans, but no receiving country, as such, denies admission to European immigrants. Therefore, Italians, Germans, and South-Eastern Europeans can emigrate to Australia, Brazil, Canada and the United States without any major difficulty.

In the sixth place, the total number of Europeans involved in all the over-populated European countries, and particularly the number of people who would actually want to go and settle in the new countries, is small in comparison to the numbers that would like to go from Asia. And when all these factors are remembered against the background of the comparatively stationary and stabilized (and even declining) nature of the population of Europe, the problem of Europe's population is not beyond an easy solution. Hence, the overcrowded European countries such as Italy to-day constitute no threat to peace and, if there is a threat, the question can be solved comparatively easily.

The problems of population pressure in Asian countries, on the other hand, are formidable for many reasons. The population pressure is most acute in South-East Asia and least in the Pacific. By South Asia is meant Asia, minus the Middle East — (roughly equivalent to the Mohammedan World) and the Soviet Union. This region comprises the area beginning with Pakistan and India in the East and ending with Hawaii in the Far East. Australia and New Zealand and the various Pacific islands come into the picture, not because they have problematic population pressures but because they have "empty spaces" that can be a

would cause tensions. No matter how numerous their population, these countries are weak by the very virtue of their unmanageable numbers. The socio-economic prerequisites necessary for war are simply not present in these countries. In a word, an empty sack that cannot stand straight can hardly fight. An Indian or Chinese peasant who wants more land can hardly be expected to fight for it, especially when he does not even know that empty lands are available elsewhere. So India or China, as they are today, can never constitute a threat to peace. On the contrary, the very weakness of these countries may invite the unwanted attentions of stronger neighbours who may want raw materials, or strategic bases, or spheres of influence. This specious reasoning fails to recognize the true nature of population pressure as a contributory cause of war. Dr. Thompson, perhaps the most distinguished student of this question, writes : " It is not an absolute quantity which can be measured by persons per square mile of arable land, or per capita consumption of rice, or by some other objective standard of consumption ; it is as much, if not more, a psychological factor, a feeling which cannot be measured accurately by any known economic standard. It is not, therefore, absolute poverty which measures the degree of population pressure as a danger to peace but the *felt* lacks, the *felt* pressure on resources, the *felt* discrimination in the access to the resources of the world. Perhaps it will help us to understand the role of *felt* population pressure as a cause of war if we draw an analogy between the struggle for a better distribution of national income in our own country and the struggles between nations for a larger share of the world's resources.

" Who are the people most aggressive in demanding a larger share of our national income ? They are not the poorest and most poverty-stricken of our people. Those who are loudest in their demands and who are in a position

It may be contended that over-population, as revealed through mere density of population per square mile, need not lead to any violent attempt on the part of the over-populated country to change the *status quo* or disturb international peace. In the short-sighted view of some, the very existence of "absolute over-population" as in China, India or Indonesia negatives any attempt on the part of these countries to wage war. The populations of these countries are supposed to take poverty, under-nutrition, unhealthy conditions of living and other economic and social disabilities of a low level of living, so fatalistically that they may not even be aware of these depressing disadvantages. It is said that on the contrary they may even be happy in their misery, for they know of nothing better. It is then asked how these people, who are not even conscious of these difficulties, except as divinely ordained accidents of life, can seek to remedy their lot. A man who is not only not conscious of his ailment but takes it as an unavoidable part of the regular scheme of things, or what is worse, as divinely ordained, seldom seeks the advice of a doctor or makes any other serious attempt to become well and healthy. So is it with nations, it is contended.

What is more, these countries of "absolute over-population" have not the means of waging modern wars, even if they want to. Modern warfare presupposes the existence of an advanced, integrated and industrialised economy based on the existence of a surplus after current consumption, which surplus could be utilized for warfare. But these countries, which are sometimes marked by miserable and precarious standards of living almost to the point of famine, can hardly be expected to behave pugnaciously. A population which is continually underfed, under-clothed and underhoused is never very healthy or educated. Such a population can neither wage war, nor accompany its claims for more land with the manifestation of force which

sense of constituting a political or military threat ; at present they provide merely moral and economic problems. But in so far as they achieve greater political consciousness, together with greater economic power and industrial development, they may, in the not distant future, constitute such a problem — and one of the first magnitude".⁷

The inter-group scramble for a fairer deal within a nation is much the same as between nations. This explains Japan's recent aggression to a considerable extent. Not that Japan was poorer than India or China but that she became aware of the unjust distribution of the world's resources and began an attempt to rectify this denial of access to raw materials. The military defeat of Japan and the well-deserved grant of freedom to her former colonies, i.e., Manchuria, Korea and Formosa, has not solved the Japanese problem. If nothing else is done about Japan's desire to maintain a decent standard of living beyond imposing an American pattern of democracy, the problem of her population, it may be said, has not been touched ! But more of this presently. This inter-group antagonism within a nation for a better share of the national income is taken for granted ; in fact, the nature of political party systems of a national administration is based on recognition of this principle. The attempts of each group or nation to better its own economic and social position is, therefore, taken as natural and legitimate.

There is another aspect to this analogy. It is coming to be increasingly admitted that economic and social inequalities among various groups *within* a community are fundamentally incompatible with democratic ideals. Political democracy without economic betterment and social progress is no great ideal. The concept of a welfare state in-

7. J. C. Flugel, *Population, Psychology and Peace* (London, 1947) pp. 3 and 21.

to force consideration of their claims for better living, are the strong labour unions and the well-organized farm groups made up of the more prosperous workers and farmers. Share-croppers, casual labourers, unorganized clerical workers, and others who really have much inferior living conditions not only do not get much consideration but do not even make much trouble. The people who make demands for better living conditions and who fight for them effectively are the people who have already attained a substantial share of the good things of life, who are convinced that they and their fellows are entitled to a still larger share, and who are able to organize to press their demands against the entrenched interests which oppose a 'new deal'".⁶

Though the over-populated countries may not, indeed do not, have the technical wherewithal to embark on a war to remedy their demographic situation, sooner or later the "absolutely over-populated" countries become not only conscious of their acute position, but conscious of the more important fact that it could be remedied. Then the latent threat of war ceases to be latent. As Dr. J. C. Flugel, the British social psychologist puts it, "Nor can we legitimately hope to abolish the threat of war as long as some countries are overfilled and others relatively empty. Over-population is certainly not the only cause of war, but there is little doubt that it is one of the great underlying causes, and by general admission economic distress is an important factor that encourages men to go to war. The very fact that over-population is an underlying cause, rather than an obvious and immediate one, makes its operation all the more insidious and provides the more reason why it should be realized and understood The over-population of such countries does not at present constitute an international problem in the

6. Warren S. Thompson, *Population and Peace in the Pacific* (Chicago, 1946) pp. 18-20.

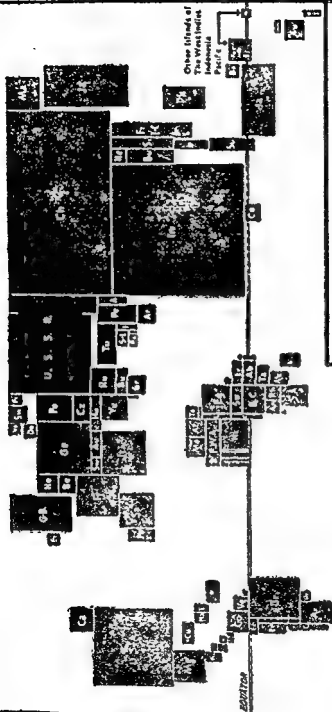
they would need more land and more resources. However, if they are to be condemned to their present poverty, it may not be long before international peace is disturbed. It is quite possible that such an attempt to change the *status quo* with force may not succeed. But wars have never really achieved their avowed objectives. They only leave behind a world of distress, disease and death on a global scale. The way in which these problems are met and solved will be a measure of our ability to preserve peace for at least a few generations.

It may be asked, what do these overcrowded peoples want? Do they want access to raw materials? Do they want trade outlets? Do they want to emigrate to lands colonized or controlled by other nations? What exactly is the Asian demand?

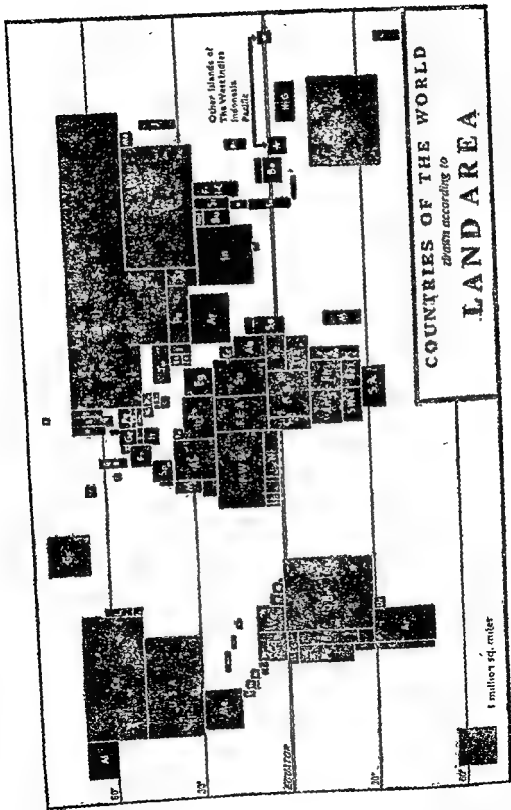
These questions are so general in character that to understand their implications in full, a review of the overall population situation in certain over-populated countries is necessary. We need not take all Asia into consideration, for not all Asian countries have reached the stage of hanging out the warning "Standing Room Only". We need consider only the most crowded of the Asian countries, namely Japan, China and India. The peoples of these countries will soon be coming into their own, politically and economically. And a combination of political freedom and economic necessity will doubtless lead to demands — just demands in their eyes — for rights to emigrate, cultivate and develop the potentially useful but unused arable lands of the world. This demand, as years go by, will become increasingly insistent, if not aggressive. If any premium is to be placed on international peace, co-operation and amity, these demands must be recognized and considered before these demographic tension spots explode and render changes in the *status quo* in the Far East and the Pacific immediate and imperative.

volves an attempt to treat all nationals of a country as first-class citizens and to afford greater economic opportunities to the under-privileged group. This is reflected in all our national taxation systems. In fact it is considered to-day the duty of a national government in a democracy to see that every individual citizen has the wherewithal for healthy and decent living, together with a reasonable opportunity for the development of his interests and capacities. Such a duty is admitted to be laudable and such efforts are characterized as progressive. But when this is applied to relations *among nations*, there seems to be some shuddering as if something revolutionary had been proposed. If we admit, as we must, that the presence of an economically submerged group within a nation, is not conducive to the peace, welfare and prosperity of the nation as a whole, it must also be admitted that the existence of countries with pressing economic and demographic problems will not be conducive to the peace and welfare of the world nor helpful in realizing the ideal of "One World". After all, a mansion sits ill at ease in a slum. It is, therefore, all the more imperative that relief must be granted to overcrowded countries by countries which have at their disposal empty spaces they can never hope to fill.

What of China, India and other countries in Asia? Once these countries regain their political freedom and stability — as indeed India has done recently, — they will certainly feel the injustice and discrimination in the distribution and the consequent denial of land. As erstwhile colonial possessions in Asia regain their lost political freedom and begin to consolidate their political and economic gains, it will not be long before they come to know world conditions and what is their due. It will be the path of wisdom for both the West and the East to realize this situation and remedy it voluntarily before these tensions lead to war. If over-populated countries of Asia should increase their present subsistence level of living to a slightly higher standard,



A comparison of the two charts enables us to grasp how very unequally the population is distributed among the different countries and continents.



COUNTRIES OF THE WORLD

shown according to

LAND AREA

1 million sq. miles

will take them. This solution of migrating from densely and over-populated countries to thinly or under-populated countries according to this theory, is full of fallacies, and, even where it is possible, it bristles with difficulties. Barring cases of internal or inter-provincial migration, this expedient has been tried in many cases where empty lands were available, but practically never with success in reducing population pressure. Population in all old countries is always under pressure ; it never grows as fast as it might if all conditions were favourable and there were no restraints. This pressure arises from the combination of a super-abundant biological capacity to reproduce and a powerful complex of instincts, desires and passions. Some sort of check on population growth is always at work. It may work by raising the death rate or by restraining the birth rate either through the discouragement of marriage or in some other way.

It is further contended that emigration and the psychological feeling of relief arising out of emigration possibilities seem to relax these checks. Emigration not only relaxes the checks but does not diminish the force of the reproductive drive. This is abundantly able to fill up any gaps left by emigration and it often promptly does. The net effect on population pressure and its attendant evil is nil. In fact, certain extreme exponents of this "theory" believe that they are actually intensified. This goes back to what Malthus maintained, namely, that in the long run emigration does not affect the size of the population in either the sending or the receiving countries.

An answer to this major objection to mass migration has to be a mixed one, in the sense that it cannot be a categorical yes or no. Past experience of mass emigration provides both confirmation and denial of the above objection. To take Europe as a whole, the rapid population increase which occurred after the beginning of the Industrial

While, of late, it has been maintained that national population pressures should not be advanced as a basis for demanding *lebensraum*, colonies or trade outlets, it is, nevertheless, recognized that inequalities in the distribution of population, land resources and economic opportunity must be reduced if there is to be an end of current international tensions. It is increasingly realized that poverty anywhere constitutes a danger to prosperity everywhere. After all, social justice, like peace, is one and indivisible. And future emigration will not be like seeking colonies and crowding out the indigenous people as in the past, but a peaceful movement of people who will give up their loyalty to the country where they find neither land nor economic opportunity and settle down in a thinly populated country and make it their own.

But certain well-known objections to emigration, and emigration of Asian population particularly, as a solution to population pressure, should be discussed before these demographic danger-spots are reviewed.

Two general objections to emigration from overpopulated countries to thinly populated or relatively unsettled regions, may be dealt with, before the specific objections against *Asian* immigrants are considered. One is that emigration, even mass emigration, does not solve the problem of population pressure of the sending country and, secondly, that the "open spaces" in countries like Australia, Brazil and Canada are a myth and that the thinness of their settlement is more apparent than real.

The first argument that emigration does not solve the problem of population pressures in the sending country may be elaborated into something like this. If a country is baffled by the problem of caring for its continually growing surplus population, let its government organize extensive transfers of population, preferably to its own colonies, if any, but otherwise, as colonialism is declining, to any country that

contraception is already available and is even utilized by a thin upper layer of the population. But available statistical evidence of the volume of emigration and its effects on birth, death and survival rates of the sending country, limited as it is to certain countries and short periods, does not conclusively prove or disprove the major objection to mass emigration ; for, after all, the growth or decline of the population of a country is a product of a complex set of socio-economic and religious-cultural circumstances.

Whatever might be the exact demographic relief that an over-populated country might enjoy through mass emigration, it cannot be denied that the sending country will reap some economic reward by sending her surplus people to an undeveloped country or region. Apart from the argument that at least the migrating individuals and families will benefit, there is no denial of some indirect relief to the sending country in so much as a certain number of mouths need not be fed.

Japan provides an example of such relief. In recent years population pressure in Japan has forced a considerable emigration from Japan proper to Korea, Formosa and Manchuria. When Korea became part of the Japanese Empire in 1910, there were 172,000 Japanese and by 1947 this population had risen through additional immigration, to 630,000. Formosa had absorbed over 300,000 Japanese in 1938 and this number increased to 420,000 by 1947 ; and in Manchuria there were 593,000 Japanese in 1937 and they increased to about 615,000 in 1947. It is true that the Japanese emigrants to these areas, in contrast to the European emigrants during and after the nineteenth century to the Dominions and the New World, did not, by and large, engage in agriculture. It is because these emigrants came from the ruling imperial country and so confined themselves primarily to public and professional services, commerce and industry. This was so because the

Revolution was accompanied by a steady rise in the general standard of living. More important, as millions of Europeans left Europe for the new lands, the population left behind did not grow as rapidly as it once did. As already pointed out, most European countries that sent out millions of emigrants have to face soon the problem of a stationary population. They have relatively high standards of living and their net reproductive rate is about or below unity. But the experience of certain specific countries, such as Italy, sustains the objection. Italy has sent out during the last century millions of people. The present current increase — rate of increase and the net addition — is such that enough ships may not be available to move out people fast enough to achieve demographic stability.

If mass emigration gives the people of the sending country a sense of false relief leading to earlier and more numerous marriages with a consequent rise in the birth rate, it is also true that usually the bulk of the emigrants are neither too old nor too young and are usually in the age group most conducive to fertility. Hence, when a mass of able-bodied men and women move out of a country, the birth rate in the sending country as a whole must perforce fall.

There is also the possibility that any economic relief in the sense of a higher per capita income derived from sending out emigrants may eventually result in a higher standard of living. When a people achieve a higher standard of living, the normal tendency is to hold on to it. It is quite possible that the people may realize that the only way to maintain this higher standard of living is through curtailing the birth-rate. There is a time lag between the departure of the emigrants and the dawning of this feeling or realization of the relation between the higher standard of living and the reduced birthrate. This attitude can become effective in communities and countries where some knowledge of

send their surplus population to the white man's countries easily because of racial discrimination. Of course, the sending of emigrants may not solve the population problem of the country of emigration. One may cite the examples of Ireland, Germany and Italy to illustrate the argument. In other countries as well, the condition may become similar after a lapse of time, when the vacant places are filled. However, we must not forget that the interval of migration will mean less pressure of population in the countries from which the migrants go, giving hope to the people and perhaps reducing many cases of unemployment. It is entirely different from the situation where people cannot increase because of being "bottled up". It may be compared with the difference in two lakes whose water levels are the same but where one has a river flowing in and out, giving a freshness to its waters, while the other has no inflow or outflow and the water becomes stagnant. In other words, migration will not be without significance although it may be nothing but a temporary mitigation of over-population".⁸

Writes Julius Isaac more recently in a similar vein : "Though it is not possible exactly to determine the effect of immigration on the growth of the population in the home country, the available evidence indicates that we should not be justified in minimizing this effect in the past, and it seems plausible that the general population trend, as reflected by the fall of the net reproductive rates, the general rise in the standards of living and the increased practice of birth control, tend to make population growth more susceptible to losses of population emigrants."⁹

A recent report of the International Labour Office points out, "Although in present circumstances, large

8. Shiroshi Nasu, *Population: Harris Foundation Lectures*. (Chicago, 1930) pp. 167-168.

9. Julius Isaac, *Economics of Migration* (London, 1947) p. 136.

Japanese came from a country with a higher level of living than that prevailing in Korea, Formosa and Manchuria, and they could not successfully compete with the indigenous farmers in these countries. Added to this was the prestige of the ruling classes. Had the Japanese emigrated to a country which was not their political colony and where the ruling power was not their own, then they certainly would have engaged in agriculture and other food-raising pursuits on a par with the natives of the receiving country as they did in the United States of America. Even so, it cannot be denied that this emigration, restricted though it was in its occupational structure, provided some relief in general demographic and economic terms to Japan proper. We might speculate to-day whether or not Japan would have entered the second World War, if the Western nations who hold unused lands in the Pacific had shown a better appreciation of Japan's compelling demographic pressure. The factor of emigration, therefore, as a solution of population pressure has not entirely outlived its utility.

The Japanese point of view is expressed simply and objectively by Dr. Shiroshi Nasu, who observes: "The problem of increased population is one which is easier for the white race than for other races to solve since the white race occupies the greatest area of the earth's surface. In the first place, there are many countries occupied by the white race where such a question has not occurred because of the vast areas. In the second place, there are countries where, although the question has occurred, it could be solved by sending the surplus to their colonies. And in the third place, although there may be countries without sufficient colonies, still these countries have been able to send their surplus population to other countries or colonies without much difficulty.

"Now Eastern nations, already overcrowded, have no colonies to which to send their people. Neither can they

607,000 people including aborigines. Thus on two thirds of the continent, an area greater than that of India, there are barely 1,000,000 people. The remaining third, comprising the states of Queensland, New South Wales, Victoria and Tasmania, holds almost 6/7ths of the people (or about 6,000,000) and in this third of the continent the proportion of unoccupied land is only about 10%. There are reasons for these inequalities both within Australia and between Australia and other countries. They are not fortuitous nor are they due to indolence or greed on the part of Australians. The distribution of settlement in Australia has been, and must continue to be, governed by the permanent facts of geography".¹¹

The author's conclusions about the myth of empty spaces in Australia are obvious. Let us look at the "permanent facts of geography". But before discussing the permanent facts of Australian geography, certain other basic facts about Australia must be stated. Australia, which is almost as large as the United States, had in 1947 a population of slightly more than seven and a half million (7,580,820). If some 50,000 aborigines were excluded, the population was all white, in fact, mostly British. Australia's birthrate, like that of England and north-western Europe, has been declining for nearly a decade, as observed in the last chapter. If present trends of fertility and mortality continue, Australia will register little growth after 1970 and may have about eight million by the end of this century, that is, if no large-scale immigration takes place and if the present immigration laws are not changed. Another remarkable but not widely known fact about the Australian population is its excessive urbanization, as in Latin America. According to the 1933 census, 47 per cent of the population was returned as urban. To-day the urban population is slight-

11. W. D. Forsyth, *The Myth of Open Spaces* (Melbourne, 1942) p. 68.

scale emigration is thus impracticable, there are indications that emigration on a more limited scale might play a subsidiary but useful part in helping some of the less developed countries to solve their problems of under employment and, at the same time, bring beneficial effects to the receiving countries"¹⁰

It cannot be denied that emigration yields certain benefits to the sending countries.

It is easier to answer the second major general objection that the world's open spaces are a myth and that the thinness of the sparsely settled areas is more apparent than real. According to this view, space does not mean economic opportunity and the existence of empty and thinly settled regions simply means that they are not suitable for human habitation, at any rate, suitable enough to maintain a high standard of living. This contention, with reference to Australia, for instance, takes this form, in the words of an Australian student of the problem. "In 150 years of settlement less than 10% of the land in Australia has been thought worth purchasing, and to-day not much more than one per cent is cultivated. Half the continent is held under lease or license which, for the most part, means that it is used for pastoral purposes, and generally that it is suited to those purposes only. Over a third of the area of the continent remains entirely unoccupied because it is economically valueless. The proportion of unoccupied land is highest in the state of Western Australia, in which more than half of the area is unused Crown land. The state occupies a third of the continent and is nearly as large as Argentina, but supports half a million compared with Argentina's twelve million people. South Australia and the Northern Territory comprise the middle third of the continent, 40% of which is unoccupied. At the last census (1933) this area held only

future millions of Australia are going to find their dwelling-places and occupations in the lands already known by 1865 Yet the six millions of Australians possess in the south and east of Australia, one of the best areas in the world for white settlement. In this quarter of the continent the writer expects some twenty millions when Australia is developed to the same extent as the U.S.A."¹³ Another Canadian geographer, G. H. T. Kimble, calculates that Australia can support about thirty million people, on the assumption that Australia can maintain a density of population similar to those achieved in certain regions of the United States with comparable rainfall and temperature.¹⁴ The simple truth of the matter is that Australia can support at least three times the size of her present population at European standards of living, if the tropical areas of the continent can be brought under effective utilization. This, unfortunately, cannot be done, as Australians, like most Europeans, cannot thrive in a tropical climate. All evidence points to the very limited success which has attended the colonization of Europeans in low latitudes. A British geographer, Professor Fitzgerald, writing in 1946, observes that "Europeans, save those of Latin countries, have certainly not proved their capacity for successful acclimatization within the Tropics. Complete acclimatization demands the fulfilment of certain tests, including the ability of the colonist to preserve his virility, without impairment due to climate or other circumstances of the physical environment. The population of the colony should be able to maintain its numbers by natural increase alone, whilst a further test demands that, as regards manual work, the colony should be independent of the native population.

13. Griffith Taylor, *Australia* (London, 1940) p. 118.

14. G. H. T. Kimble, *The World's Open Spaces* (London, 1946) p. 58.

ly more than 50 per cent. And it is well known that urban populations do not multiply. On this score, also, the Australian population is not apt to grow unless something contrary to Western urban experience in birth rates happens in Australia.

Taking rainfall and climate into consideration, it has been estimated that Australia has about one hundred million acres of tillable land. It is found that on an average, between 1935-40, only about 22 million acres have been sown under crops. This is in the temperate zone. In tropical Queensland, however (with a rainfall of over 30 inches), only a little over a million acres have been brought under the plough, though it is possible to cultivate nearly ten million acres. According to Dr. Thompson, "There is no doubt whatever . . . that only a very small part of the land of tropical Australia suited to intensive culture is now being used. Tropical production could be increased many times if this land were tilled in family-sized farms for general agriculture, such adaptations being made as would be needed in the tropics. It should be emphasized again in this connection that the Australians are very certain that they can work in the tropics and do their own development in this region. The fact is, however, that they are doing very little to exploit the agricultural resources of this area, and it seems highly improbable in the light of their probable future population growth that they will do much in the next several decades".¹² In fact, after considering all the climatic and geographical drawbacks of the Australian continent which minimize its carrying capacity, it has been estimated that the region can accommodate at Western level of living anywhere between 15 to 50 million. The Canadian geographer, Griffith Taylor, leans toward the latter figure for the continent as a whole. As for the temperate region he writes that "the

very limited areas of British Tropical Africa, which exceed an elevation of about 4,000 feet, are used for permanent European occupation, and beyond the frontiers of the Union of South Africa, the total British population of the continent is but 100,000, or very little more.

"Not only the climatic factor, however, militates against British or other West European colonization within the African and Asiatic Tropics. There, unlike Australia, the native population has proved its capacity to adjust itself to the various regimes which European powers have established. The labour of the African Negro, of the Indian and other coloured peoples, has, from the outset proved indispensable to the maintenance of the white man's own standard of civilization. Throughout the Orient and Africa, south of the Mediterranean border, there is no place for the unskilled or semi-skilled European worker, who, in Europe, to the number of many millions, was unemployed in the years before the second world war. In British Africa, the density of the white population is low almost everywhere, when measured by the densities prevailing in Europe. Yet for one reason or another, the menace of climate; the presence of a virile native population fully capable of meeting demands for unskilled, and some branches of skilled labour; or the established tradition that the white man should not engage in manual toil—it has been virtually impossible for British citizens, other than the wealthy or the highly skilled, to settle in Africa".¹⁵

What is more, the Australian population is not apt to grow to fill up the continent. Australia desires almost solely British immigrants and the growth of British population is such as not to encourage any mass emigration from Britain. And Australia may not even permit any large-scale emigration from European countries like Portugal, Spain or Italy—

15. Walter Fitzgerald, *The New Europe* (New York, 1946) pp. 269-70.

"Most Europeans whose families have lived for several generations in very low latitudes bear the evidence of physical and mental deterioration. Tropical climates are particularly severe on women and children, and it is not unusual for them to seek relief from the strain of tropical residence by fairly regular holidays in temperate latitudes. There are relatively few instances of British families remaining in tropical residence for several successive generations, whilst it is extremely rare for such colonists to undertake the heavy work of agriculture or of manufacturing and mining industries.

"Queensland is renowned as providing the only considerable instance of a colony of British origin able to undertake agricultural work well within the Tropics. The sugar-cane plantations, established along the coast to the north of Brisbane, have prospered without the necessity to recruit coloured labour. Yet it has been shown conclusively that the plantation workers are carefully selected for their superior physique, that their ages range usually between twenty and forty, that the percentage of women in the population of Eastern Queensland is lower than the average of Australia as a whole, and that many workers, in their years of retirement, choose to reside in the more temperate parts of the continent. Other factors in white acclimatization include, in addition to high rates of wage, severe tariff restrictions on imported sugar, which virtually exclude such sugar from the Australian market.

"The field labourers of Eastern Queensland cannot, therefore, be cited as evidence of successful white acclimatization in a tropical environment, whilst, throughout the remainder of the hot, humid belt of Australia, there is no other case of considerable European settlement. Moreover, in no other tropical part of the British Empire is there a serious attempt on the part of Europeans to undertake the heavy manual work required by agriculture or other industry. Only the

realize the dangers inherent in the concept of dual nationality as in the case of Chinese overseas ; and any country that receives immigrants must have the right to insist severely on the adoption, on the part of the immigrant, of the nationality of the receiving country. But race problems arise largely because of prejudice, discrimination and segregation, and no one can seriously maintain that the race problem is a non-white problem ; it is fundamentally a white man's problem. It is the intolerance of the westerner that has led to race problems and the tendency on the part of the oriental immigrant to form an enclave. The Australians themselves are realizing of late that these potential tensions ought to be eased in the interests of international security and peace, and that no country is entitled to hold or control a vast territory and vast resources simply to protect its cultural heritage, in a world too where large areas are suffering from intense over-population and land hunger. An Australian diplomat, F. W. Eggleston, writing in 1948, advocates a liberal policy. Says he, "An authoritative review of Australian immigration policy is badly needed At present, Australia can attract from Great Britain and Europe immigrants whom she can absorb because they are easily assimilable and anxious to conform to her way of life. Many Asians, too, are willing to adopt that way of life and could conform to Australian economic and social standards. These, Australia should welcome. But immigration of large numbers of Asian labourers would disrupt the national economy and create fierce opposition. There are two types of immigrants: those who wish to make Australia their home and to merge into the community and accept its standards, and those who are temporary visitors. The system now in force for the latter type is satisfactory and must be retained. Immigrants of the former type should be admitted on a permanent basis ; they should contemplate naturalization, and the ban on naturalization of

immigrants who may thrive on a tropical and sub-tropical climate — not to speak of permitting Asian immigrants. So the latent possibilities of bringing the land in tropical parts of Australia under cultivation will continue to remain unutilized. The problem of Australia in a changing world in relation to these factors is summed up admirably by Dr. Thompson when he says: "To the outsider trying to look at the future of Australia in the light of larger world trends, it appears that Australia's choice is not whether she will remain essentially as she is, racially, socially or economically, or allow a relatively large amount of non-British immigration, or whether she would prefer the changes in her manner of life produced by a rather large non-British immigration of southern and eastern Europeans selected and controlled by herself, or *those introduced by an Asiatic conqueror*. Australia must either increase her population to the point where she can make reasonably full use of her resources and thus develop the power to protect herself from outside attacks, or she will be conquered and settled by some of the Asiatic peoples".¹⁶ In fact, Dr. Griffith Taylor, who has made a careful study of the carrying capacity of Australia and who does not minimize the difficulties of soil, climate and rainfall, has advocated admitting small numbers of Japanese, Chinese and Indians for fully developing the tropical area and for reducing the friction between Australia and Asia.

It will be misleading, however, if this discussion gives the impression that the problem is receiving no attention in Australia itself. It must also be said that enlightened Asian unofficial demands grant readily that every country has a right to decide upon the composition — racial and otherwise — of its population and the creation of foreign unassimilable enclaves should be resisted. The Asians also

cry that the Asian immigrants would work for lower wages, compete with the natives and reduce the native workers' standard of living. Such contentions ignored two facts. One is that there is a minimum wage law in most organized industries and the Asian emigrant cannot work for lower wages than the natives unless it be illegally and then, of course, there are the labour unions. Secondly, it has never been the emigrant's desire to work for less. It is the employer's discrimination against the new immigrant worker that has often forced the latter to accept lower wages. The fault is not with the emigrant but with the laws of the receiving country (which may and often do permit discrimination), and the absence of fair-employment practice in the country and the evasion of such a law on the part of the employer when there is one. The American Government finally passed the legislation, lifting the ban against Indian and Chinese immigration, and the native worker to-day seems to be no worse off than before the law was passed ; of course, the immigration is only a trickle because of the American quota system. It is often forgotten that in many countries the native of to-day was the immigrant of yesterday. The prejudice voiced by the native is often a product of the shortness of public memory.

If the wage of the immigrant worker is expressed in terms of real income and not money income, the Asian emigrants may be able to save perhaps a little more than the natives because of their different "standard" of life. As Lord Crewe pointed out at the London Imperial Conference of 1911, in the course of his denunciation of the exclusion of Indians from employment on vessels trading to the ports of Australia and New Zealand (this has been changed long since), "There is nothing morally wrong in a man being a vegetarian and a teetotaller and his wife and children being able to live very much more cheaply than people who adopt the European standard of comfort. If a man is content

Asians should be withdrawn. The numbers naturalized should be controlled by something resembling a quota system. Naturalization would involve abandonment by the immigrant of his previous nationality and acceptance of allegiance to Australia".¹⁷

Now for certain specific objections raised by the thinly-populated countries against receiving people from over-populated countries. One is that those immigrants, accustomed as they are to a lower level of living, are apt to pull down the high standard of living of the receiving country. It must be said, to begin with, that these thinly-populated "white" countries have no objection relatively to receiving immigrants from overcrowded European countries and so the objection to be discussed here refers only to receiving immigrants from Asian countries.

In answering this objection, it must be borne in mind that these Asians want to go to these thinly-settled countries to raise their standard of living and not to lower that of their hosts. Secondly, it is much easier for a person accustomed to a low level of living to adjust himself to a higher one. It needs no effort. It cannot be conceived that the Asian loves his poverty, his coarse and inadequate food, his rags and hovel. He would like to eat well, dress well and live in a comfortable dwelling and, above all, he desires like anyone else, to be a useful citizen and to be treated with respect and dignity. It is the opposite, namely, the rich man reduced to rags, who finds it difficult to get adjusted.

In 1944, while the American Congress was considering lifting the ban upon Asian immigration, putting the Chinese and Indians on an immigrant quota basis and according them treatment similar to that given to European immigrants, certain circles in the United States raised the usual

17. F. W. Eggleston, "Australia's Immigration Policy", *Pacific Affairs* (New York—Dec. 1948) p. 383.

problems readily come to the forefront. Negroes in the United States, Indians in South Africa, Orientals on the American continent, Indians and Chinese in Ceylon, Burma, Malaya, Thailand and Indonesia constitute minority problems which are the products of unplanned, forced or free migration. But the problems that are being envisaged here will be those created by Orientals migrating into "white" countries. In ideal circumstances, there should be no minority problems at all because there are really no superior and inferior "races". The saying that all human beings are brothers under the skin is no slogan of a liberal journalist, but a sober scientific fact. But human nature being what it is miseducated to be (brotherhood is really teachable and human beings are not born with prejudices), certain painful problems of adjustment are bound to arise. "Race prejudice" need not be taken to be the normal behaviour pattern and the normal emotional outcome when peoples meet. "Race prejudice" is more an abnormal and cultivated condition. Otherwise all the anthropological reports of race relations in Brazil and Hawaii must be misleading, for it is amazing how race prejudice and conflict have disappeared from these areas. Perhaps, we should not say "disappeared", for racial antagonism never existed there. Some North Americans, who usually export this "commodity" wherever they go, have fortunately failed to inject colour and race prejudice in Hawaii and Brazil. A Negro is treated with the same courtesy as a white man in Brazil. In Hawaii, Europeans and Orientals have intermarried both ways; and Orientals of different countries have also intermarried among themselves. A newcomer who scorns this kind of egalitarianism learns to behave after a while. As a result probably of this absence of racial intolerance, psychiatrists as a profession do not thrive in Hawaii. And the people seem to be well integrated and happy individuals. The experience is the same

to live on rice and vegetables, and does not require beef or rum, he is naturally able to support his family on a much lower scale". This is an excellent example of an understatement. Simple fare, so long as it is nutritious and wholesome, is not only not "morally wrong", but is positively beneficial to health. An employer should certainly prefer a teetotaller to a mild "drunkard". The art of living consists in making a little go far and in expressing one's standards through few and simple articles of everyday use. A people who have limited means but use them to the greatest advantage for their health, efficiency and culture, have really a higher standard of life, and the fact that they live frugally and can do without things which neither contribute to health nor the dignity or refinement of life have not only nothing to be ashamed of, but are really at a higher stage of civilization in the true sense of the word.

Another objection is that any large-scale immigration of Asian population into these thinly occupied "white" countries would raise a host of "race" problems and soon create minority problems with all their attendant difficulties. There is, of course, no objection to receiving white immigrants, for the United States, Canada, the Latin American Republics, Australia, New Zealand and South Africa would not be on the map to-day but for large-scale European immigration. While these countries have been "founded" and developed by emigrants of a common Western cultural heritage, and of one and the same colour, minority problems based on religion and language have arisen. Hence the "Jewish" and the "Catholic" problems. But the "white" countries believe that assimilation has been rendered easy because of a common cultural standard. The case will be different when people of a different colour, ethnic origin or culture emigrate into a "white" country, and the problems of assimilation become well nigh impossible. It is true that, if all kinds of immigration are considered, examples of painful minority

This solution of permitting, indeed encouraging, overcrowded people from Asia, such as the Indians, Chinese and Japanese, to emigrate to regions now inhabited by people considered "quasi-primitive", or at any rate with considerably less advanced civilizations than those developed by the Asians in general, in utilizing land and other resources, raises one more vital objection. It is true that these regions are very thinly populated and the present rate of growth of the native populations does not promise the filling up of the empty spaces for a considerable length of time, if at all. As for the Europeans, they are at best birds of passage being administrators of these trust or mandatory areas. The Europeans have never seriously considered colonizing these lands in the sense of becoming a permanent element of their population.

The real objection is an ethical one and should be raised from the point of view of the ultimate welfare of the indigenous population of these regions. The United Nations and the countries which administer these areas as trust territories (in practice they are seldom treated as a trust) maintain that they have no right to permit alien population to immigrate into these regions only eventually to crowd out the native in his own land. It is possible that the native population may gradually learn to control their present high death rate and grow in numbers, preventing the present great demographic wastage ; then they may need all the land which now appears to be an unused and unwanted surplus. Secondly, it is possible that the alien—albeit Asian—population that may be permitted into these regions as immigrants may grow at a faster rate, eventually swamping the country and reducing the natives to a numerical minority in their own country. This is no ungrounded fear, for the fertility rates of the incoming Indians, Chinese, Japanese and Indonesians are generally higher than the known birth rates of the indigenous populations of these regions. And the Asians

with the attitude toward race-mixture in France. The darkest Negro can marry a blond woman and raise a family in Paris without provoking any of those irrational and complex fears and hatreds that would result from a similar marriage in the United States, or worse, in the Union of South Africa. The argument that the situation in France would be different were there a larger Negro community does not explain the absence of race prejudice in France. Race prejudice is not an innate human instinct; it is a product of an immature society caught in the grips of a reactionary government and a nauseating miseducation of the citizen from his birth. Hitler's Germany, Malan's South Africa and some southern states of the United States are excellent examples.

The major problem in other areas, however, is one of "racial" and cultural assimilation and the barrier to such assimilation is nothing but fear based on sexual jealousy. This is an over-simplification, but it is true that different types of human beings are capable of interbreeding freely and do so under favourable conditions. The antipathies and animosities between "races", and cultures, and the cults of "master" and "servant" races have no basis whatever in biological fact. No intelligent student need despair of inter-racial marriage. The children of such unions suffer to-day in many cultures, not because of any inherent biological deficiency but because of the irrational social mores of the cultures in which they find themselves. Humanity need no longer crucify itself by submitting to such unscientific fears. In brief, while Asian emigration to "white" countries would raise acute problems at the beginning, the acuteness of such problems would be considerably less when Asians emigrate to non-white countries. It is not maintained that Asian contact with peoples of the Pacific Islands, for instance, will raise no problems; but at any rate there will be no *Herrenvolk* feeling in these areas between the natives and the newcomers.

divest himself of his political loyalty to China. So long as China insists on this, the organized emigration of Chinese under an international authority that the present writer is advocating can never be possible.

Past experience of European emigration to some of these regions also may be cited to counsel against this emigration. It may be repeated that during the prodigal nineteenth century the population of Europe grew at such an alarming rate that it spontaneously emigrated and colonized the New World and the Lands Down Under. As a result of this huge wave of emigration the Europeans occupied the lands of the American Indians (what are now Canada and the United States) driving the natives incidentally into reservations. Those who went to Australia and New Zealand have reduced the number as well as the status of the Australian aboriginals and the Maoris. As an overall result of this culture-contact many native "races" in the Pacific have either disappeared or dwindled in their number through a loss of nerve. The question might now be asked whether we plan to repeat these unhappy events, substituting Asians in the place of Europeans. Have not our standards risen to higher moral levels?

In answer to all these objections it may be said that the kind of Asian emigration this writer advocates is to relatively empty lands. Secondly, such emigration is to be planned under an International Migration Authority, which will consider difficulties and provide against them. Asian emigration should not be, as in the past, a *laissez faire* business. Thirdly, the laws on nationality of the various Asian countries should be changed so as to enable emigrating Asians to adopt the nationality of the receiving country and thus be assimilated with the receiving people. Finally, the world with its poverty and hunger cannot perhaps wait for the distant day when the natives become advanced enough to make a better use of these empty spaces.

have a relatively better control of their death rates ; and when they find empty spaces and no scarcity of food and other economic opportunities — contrary to the limiting factors in their own countries — there may be nothing to check their rapid growth. Examples of such a situation are not wanting. The Chinese who emigrated to Malaya have registered a higher birth rate than the native Malays ; the Chinese together with the Indians have reduced the Malays to a position of minority in their own Malaya. The Fiji islands have experienced a similar situation in the course of half a century ; the immigrant Indians today number slightly over 51 per cent of the total population of Fiji. The educated Fijian sees in the presence of the Indian a threat to the future growth of his " race ", which has already become, if only by a slight margin, a minority.

It must also be admitted that the emigration of Asians to certain Asian countries in the Far East has raised " race " problems, though inter-Asian cultural contact lends itself more easily to assimilation than Asian-European contacts. To take the example of the overseas Chinese. About ten million Chinese reside in South East Asia and the Pacific Islands. Their emigration was not promoted or encouraged by the Chinese Government ; it was simply the overflow from the over-populated maritime southern provinces of China. They number to-day approximately 3,000,000 in Thailand, 1,250,000 in Indonesia, 110,000 in the Philippine Commonwealth and about 200,000 in Burma. In all of these places they monopolize certain lines of business and some of their business methods attract resentment. A result is that Chinese immigration is restricted in Malaya. Thailand has established an annual quota for the Chinese and so has Indonesia. Some of these difficulties have been caused by the attitude of the Chinese Government. The Chinese law of nationality is based on *jus sanguinis* which means that a Chinese, wherever he may reside, can never

TABLE 10

POPULATION AND AREA OF LATIN AMERICAN COUNTRIES¹⁸

Country or Colony	Year	Population in thousands	Area in thousands of square miles	Density per square mile
1. Brazil	1945	46,200 (est.)	3,286.2	13
2. Mexico	1940	19,654	758.6	26
3. Argentina	1947	16,104 (c)	1,072.7	14
4. Columbia	1938	8,702	439.8	20
5. Peru	1940	7,023	482.2	14
6. Chile	1940	5,024	286.4	18
7. Venezuela	1941	3,951	352.2	11
8. Bolivia	1940	3,457	416.0	8
9. Ecuador	1940	2,949	104.5	28
10. Uruguay	1941	2,186	72.2	30
11. Honduras	1940	1,173	59.2	20
12. Paraguay	1941	1,040	150.5	7
13. Nicaragua	1940	899	57.2	16
14. Costa Rica	1940	656	19.2	34
15. Panama	1940	632	28.6	22
16. Trinidad Y Tobago	1941	506	2.0	256
17. British Guiana	1941	354	89.5	4
18. Dutch Guiana	1937	171	50.0	3
19. Bahamas	1941	71	4.4	16
20. British Honduras	1931	51	9.0	6
21. French Guiana	1936	31	34.7	1

are stretches of land which, suitably drained and irrigated, can form the basis of great agricultural wealth, while in the interior vast untapped forest reserves, large mineral deposits, sources of potential power, await development. But only if greater numbers of people are forthcoming can more extensive culture of the soil and the utilization of natural resources on the grand scale materialize. In fact, the Colony's population problem cannot be formulated in terms of the Malthusian proposition as a pressure of numbers on

18 *The Statesman's Yearbook*, (London, 1948).

What of Latin America? The question of Latin American "empty spaces" and the possibility of these areas receiving future immigrants, especially Asian immigrants, has received almost no attention in demographic literature. The following table shows the area, population and density per square mile of all the regions in Latin America and reveals the amount of land that is awaiting the future farmer and his plough and tractor. The number of persons per square mile reveals further the vast empty spaces. It is not that there are no areas of high, in fact absolutely high, densities, but such overcrowded areas are relatively very few. Barbados with 1,192 persons per square mile, Puerto Rico with 550, Martinique with 641, Guadeloupe with 442 and Jamaica with 281 persons per square mile present a vivid contrast, but these densities cover only fragmentary areas, mostly in the Caribbean, and therefore, the density for Latin America as a whole is only 13 persons per square mile. The density of population in Asia is nearly seven times this number. While Latin America embraces 16 per cent of the world's habitable land area, it has less than 6 per cent of the world's population. With two possible exceptions of parts of Africa and Australia, it has the lowest density among all the major regions of the earth.

That there are tremendous potentialities for future mass migration for pioneering agriculturists in this area is admitted by most students of the problem. The region is vast enough to accommodate about 400 million people and that at a high level of living. The cases of Brazil and Argentina are obvious enough. Even about relatively unimportant territory like British Guiana, a British civil servant working there (1947) observes: "For British Guiana with about 4 persons per square mile, its inhabitants concentrated on the low-lying coast-lands, and its interior largely devoid of people, remains very sparsely populated. On the coastlands

sufficient number of large holdings can be made available for subdivision, there is a good chance of the *pampas* filling up in the near future. Their ability to produce cereals, especially wheat and maize, animal products, warm, temperate, and subtropical fruits has never yet been seriously taxed".²⁰

That Latin America, as a whole, has land capacity to absorb at least 250 million more people appears to be an admissible fact. It may now be asked whether all this empty land will not be needed by the Latin Americans themselves at some future date. What about the rate of growth of the Latin American people? As observed in the last chapter, much of Latin America belongs to the Late Expanding phase of the demographic cycle and is comparable to Asia in this respect. It must be admitted that the Latin American people are growing faster than any other major group of people in the world. Despite the paucity of reliable statistics it has been estimated that the rate of increase for the region as a whole has been around 1.73 per cent per year in the last ten years. That is, during the twenty year period 1920-1940, the continent's population increased by about 40 million people or about 41 per cent. If the present rates of mortality and fertility and immigration (the last factor is negligible) should continue, the population is apt to double every forty years. If the Latin American population is assumed to be 150 million for 1948, then it is likely to reach 300 million by 1988. By the year 2000 the population may exceed 370 million. This figure is within the limits of possibility, but the probability of the Latin American population reaching it without the aid of immigration is doubtful. According to available evidence, which is not ample, the fertility of Latin America is high, ranging from 25.1 per 1000 in Argentina to 39.8

20. George H. T. Kimble, *The World's Open Spaces* (London, 1946) p. 36.

the means of subsistence. Unlike several other tropical countries such as Java, the Philippines and some of the West Indian islands where dangerously high population pressures demand restrictive population policies, British Guiana stands in need of a policy of population expansion".¹⁹

In a desperately overcrowded world, the thought of Latin America conjures up before us the vast Amazon valley, a virtually uninhabited region almost as large as the United States, of the vacant pampas in Argentina, the great forests of Southern Chile which are more than necessary to maintain an ecological balance, the Guiana highlands of Venezuela — vast areas that can doubtless support large numbers of people.

As for Argentina, the scope for settling more people is equally large. Argentina with an area of 1,079,965 square miles, has a population of only 16 million (16,104,929); the average density of population is only 14.9 to the square mile and that of the Pampas proper is somewhat less. Professor Kimble, a noted geographer, discussing Argentina's ability to support more people, points out, "We get a clue to the lowness of this figure (density per square mile) when we discover that most of the land is divided up into huge *estancias* (or estates), which are worked extensively and, on the whole, wastefully. At long last, the Argentine Government is realizing that the only way to increase the productivity, and so the population of these estates, is to divide them up into small, family size holdings, to be owned and operated by the occupier (most estate owners or *estancieros* live in Buenos Aires, and rarely see their lands, being content to leave their fortunes to a *major domo*, or bailiff, who does the best he can), provided that the financial difficulties of the scheme can be overcome, and that a

19. W. Roberts, "Some Observations on the Population of British Guiana" *Population Studies* (London—September, 1948).

American Republics on the number of annual immigrants and emigrants is not available for any long period of time, the trend visible in certain countries like Argentina, Brazil and Cuba shows that European emigrants arrive in Latin America only to leave after some time for the United States of America. Latin American countries seem to be a kind of halfway rest-house. This procedure is understandable as quotas for the United States get filled easily and it is easier to emigrate to Latin America. Some of them become naturalized Latin Americans only to enter the United States on the quota allotted for Latin America. This is revealed in the following table about Argentina. This reverse migration is likely to continue as long as standard-of-living differentials and the available opportunities differ so largely between the United States and her southern neighbours. This means that Latin America cannot hope to get any great number of permanent European immigrants. A great wave of European immigration into Latin America is unlikely for many years to come.

TABLE 11

MOVEMENT OF POPULATION IN ARGENTINA FOR 1941-1946²¹

Year	Marriages	Births	Deaths	Immigrants	Emigrants
1941	92,582	303,775	136,927	5,258	13,932
1943	103,346	318,895	137,775	999	1,128
1944	110,140	340,609	141,458	1,302	836
1945	112,660	345,271	144,727	1,245	1,532
1946	115,272	345,618	138,063	4,422	5,427

If it is assumed that Latin America has to accommodate nearly 400 millions to bring all the usable but untitled land under the plough and to develop her present relatively

21. *Statesman's Yearbook*, (London, 1948).

per 1000 in Puerto Rico. The average birth rate for all Latin America may be taken as 35 per 1000, which is high enough. This is probably a product of Latin-Catholic culture. The general crude death rate for Latin America as a whole ranged in 1940 from about 4 per 1000 estimated population for Bolivia to approximately 20 per 1000 estimated population for Ecuador and Chile. If allowance is made for defective registration, the range of the death rate is likely to be considerably higher. This would yield a low survival rate. And it is this rate that is important for the increase in population. But it is not generally realized that urbanization has been going on at an increasing rate in all Latin America. In Argentina, for example, greater Buenos Aires has become such a large metropolis that it contains today more than four million people — a fourth of the total population of Argentina. The skyscrapers are rising ever higher and many acres of land have been reclaimed from the river Plata. The way of Argentine urbanization is reflected in this anomaly. While hundreds of square miles of land are uninhabited for want of population, space is being created where no land exists by building skyscrapers! This is an indication of what is to come in Latin America by way of urbanization.

As more and more cities develop, thus drawing upon the rural population for their strength, the high fertility is bound to come down with the spread of an urban-industrial pattern of living in the place of a rural-Catholic culture; the birth rate is apt to decline relatively, as seems to have happened already in Argentina and Chile. And if the present rate of annual immigration for the region as a whole continues, there is no reason to suppose that Latin Americans can possess in the foreseeable future all the empty land they have.

Again there seems to be a reverse emigration from Latin America. While adequate statistics for all the Latin

Latin America, in defining her attitude toward immigration in general, like the United States, has gone through all the stages of free immigration, selective immigration, exclusion and finally emigration on the basis of a quota. Latin American people, who, by and large, do not have the North American colour and "race" obsession, have of late begun to be unfortunately influenced by the North Americans on this question also. But, whereas the United States, during and after the second World War, has, in an attempt to secure world leadership, repealed almost all the exclusion laws on immigration in favour of admitting nationals of every country on a quota basis, Latin America has not yet caught on to this North American trend. There is a time-lag of roughly ten to fifteen years before any North American trend is copied in Latin America.

As a result, several Latin American Republics have passed legislation restricting immigration into their countries. It is unnecessary here to discuss the immigration laws of all the Republics. A few examples of immigration laws of three major countries of South America will suffice. Brazil and Mexico, like the U.S.A., have established a quota system; the Brazilian law limits immigrants from any nation up to 2 per cent of those that entered from that nation between 1884-1933. This achieves quantitative restriction as well as national selection. The highest quota goes to Portugal, though Portugal is neither over-populated nor is she in desperate need of emigration outlets. More of this later. The Mexican quota system is not fixed but flexible and the number of emigrants that may be admitted annually from different countries is subject to change. Argentina, which prides itself on being the most European, if not Parisian, of all the Latin American Republics, established in 1946 an *Instituto Etnico Nacional* which is to study and recommend the kind of emigrants that Argentina should receive.

backward economy under the present stage of technological development, it is not likely that all the Latin American Republics will sit around and wait for this increased population to come through natural increase alone at some distant date. Most Latin American countries take it for granted that the ultimate development of their economy will have to depend on the admission of large numbers of immigrants. They admit that their economy could be enriched if their empty lands were settled and exploited by a colony of desirable immigrants. They look at their huge northern neighbour who has influenced them so much and draw the perhaps not unwarranted conclusion that large scale immigration into their countries is a key to their overall economic development. It is no surprise, therefore, that these countries should actively seek immigrants, albeit selected immigrants.

But what kind of immigrants do these Republics want? An answer to this question must be sought from the history of immigration into Latin America. While the settling of Latin America was done by Spanish and Portuguese pioneers, just as North America was settled at the beginning by Anglo-Saxons, immigration to South America in later years, unlike in North America, gradually declined in volume and tapered off. So immigration accounts for only a little in the growth of Latin American population. Before 1821, immigration to Latin America was almost negligible. Out of a total of about 60 million Europeans who emigrated between 1821-1924, roughly 60 per cent went to the United States, 11 per cent to Argentina, 8·7 per cent to Canada and 7·4 per cent to Brazil. Australia received roughly 5 per cent, South Africa about 1·3 per cent and New Zealand 1 per cent. Therefore, as against 68·7 per cent that emigrated to North America, only 18·4 per cent went to South America — predominantly to Argentina and Brazil.

However, no law, much less an immigration law of a country is the last word on the subject, for it has a tendency to change constantly according to the trends of national and world public opinion.

There is also an occupational qualification expected of the future immigrant into Latin America that puts a limitation on the kind of immigrant that can enter Latin America. The thinly populated Republics are anxious to attract agriculturists and farmers or agricultural labourers who will work on the large estates. They feel that usually immigrants tend to flow first into large cities and only secondarily to rural areas. This trend, they rightly contend, would perpetuate the empty spaces and overcrowd the urban areas, a characteristic, typical of all emigration into Latin American countries. Brazil, which is anxious to attract the pioneering farmer type of immigrant, has stipulated that about 80 per cent of each national immigrant quota be reserved for persons dependent on agriculture for a livelihood. Nor does the law permit the immigrant to change his status shortly after his entry into Brazil. The law forbids the immigrant who enters as an agriculturist or as a farmer to abandon his rural occupation within five years. The penalty for such a change in occupation is deportation.

All these occupational restrictions on future immigrants is to prevent overcrowding of the cities and, what is more important, to develop the unused lands. Latin America does not want immigrant industrial workers, for they expect to recruit skilled natives to this privileged occupational group. They want farm labourers who would settle on the big *estancias* and develop the agricultural wealth of the Republics.

In brief, Latin America wants Europeans, preferably North Western European immigrants, and these as farmers and agriculturists.

It is but natural that these countries should give some attention to problems of assimilation. This question of speeding up assimilation of the immigrants came to the forefront during the second world war. During the war hysteria it was natural for the governments and dominant native groups to think of all unassimilated groups, the Japanese in Brazil for instance, as subversive. It was really a cultural problem, for no Latin American country seriously doubted the loyalty of its German minorities. This was in keeping with the United States, which during the second world war rounded up all the Japanese-Americans on the Pacific coast and put them into Relocation Centres, whereas the loyalty of German and Italian-Americans was taken for granted. It was, of course, not that the Nisei were less loyal than the German-Americans, but that the German-Americans, unlike the Japanese-Americans, belonged to the same ethnic stock as the people comprising the Government of the United States. Some South American Republics, like Colombia, which are unimportant for our purpose, following simply the past North American trend, and with little knowledge of what they were doing, banned Asian, African and Jewish immigrants. In Brazil, Mexico and other Republics, there has been a considerable admixture of blood, and no great premium is placed on a person's colour, as in the United States. In fact, in some Republics the question of race does not even enter the census schedule — a matter the North Americans can hardly understand. But, as North American mores spread, these South American Republics are becoming increasingly "colour" and "race" conscious, if only not to appear "uncivilized" in the eyes of North Americans! It appears, therefore, that, despite the admission of Africans (primarily Negro slaves) in the past, South America would like to keep her migration complexion as pale as possible. The major demand, then, for the future immigrants into Latin America is that they be Europeans.

crops and intensive farming requiring relatively smaller capital investments and less expensive social services than the commercial agriculture of European farmers. As Dr. Radhakamal Mukerjee rightly observes: "The European colonist, whether in North America, Argentina or Australia, is a farmer. The Asiatic colonist is a peasant. He belongs to the land. No title is more accurately given. In the West, to belong to the land means to become a serf or a slave. As the European farmer has migrated into the New World, he has cared only for what his land would buy for him. He has not scrupled to dissipate his land capital, his soil, grassland, and timber resources to his profit. It is often by exporting the assets of the land to foreign markets that he has kept up his standard of living. At the beginning of his colonization he has had no scruple even about displacing, demoralising and destroying the former inhabitants of the land. With Asiatic agricultural colonists, soils will be less likely to be depleted, for soils are part and parcel of the religion of ancestor worship, and the traditions of good neighbourliness that have to be bequeathed to the generations unborn".²²

The only obstacles to this peaceful mass migration of Asian peasants to unused tropical and sub-tropical lands of Latin America are the same factors that deny admission of Asian immigrants to Pacific areas — a profound ignorance of human ecology, time-honoured inter-group prejudice and a narrow racist ideology. These factors undermine world peace and international co-operation, and promote poverty, famine and international tensions.

22. Radhakamal Mukerjee, *Races, Lands and Food* (New York, 1946), p. 32.

As pointed out already in discussing the possibility of finding British and European immigrants to people Australia and Canada and other thinly populated parts of the British Dominions, the European population growth in recent years has not been large enough to seek emigration outlets. And those European countries with potentially declining populations are least willing to allow their able bodied citizens to emigrate. The surplus population of Europe is often absorbed within European frontiers, which is almost in the nature of an interprovincial migration if Europe is considered as a single political unit. Emigrating Italians are easily absorbed in neighbouring France. She is prepared to absorb some Germans as well. And secondly, when the European does migrate, he wants to go to a country with a higher level of living than Latin America can generally offer to an immigrant. And emigration, unlike water, flows from a country with a low level of living to a country with a higher level. Lastly, the modern European emigrant is not willing to emigrate to Latin America as a pioneering farmer and agricultural labourer. The few thousands of Jews, mostly displaced persons, who would have been prepared to enter Latin America as agriculturists only to gravitate eventually to the cities, are now looking eastward to Israel.

The inescapable conclusion is that the only type of immigrant that can succeed in bringing the empty lands of Latin America under the plough is the Asian peasant — the Japanese, Chinese or Indian peasant. Past experience seems to favour this type of immigrant when the receiving country takes care to see that there is no discrimination or prejudice against these immigrants who are, after all, coming to develop and enrich these countries. Vast areas could then be reclaimed from the humid temperate belts, steaming jungle, marsh and even sand dune by the Asian pioneer peasants, who are accustomed to this kind of soil and weather and whose success rests on the appropriate type of

are easily explicable. In fact, Japan's economic history and foreign policy in the second quarter of the twentieth century can to a large extent be explained in terms of her demographic dilemma alone.

Japan proper is composed of an archipelago of four main mountainous islands and hundreds of smaller ones covering an area of about 147,690 square miles, roughly as large as the State of California (158,693 square miles) or a little larger than the State of Madras (127,768 square miles) in India.

According to some rough estimates, Japan had a population of about 35 million in 1870. At that time, India and the United Kingdom had populations of 210 and 31 million respectively. The area occupied by these 35 million people was essentially the same as present day Japan proper stripped of her empire. Perhaps her conquests and the building of her empire up to the beginning of the century cannot be attributed only to the pressure of population on the home islands and the consequent demand for living space. There is no doubt, however, that the need for expansion arose when the Japanese people through their contact with the outside world became conscious of the possibility of a higher level of living. The none too edifying example of the Western nations who grew rich and prosperous by empire building, and by exploiting the weaker peoples of their colonies was not lost upon Japan ; but the course of Japanese political history after 1904 can be interpreted as the result of interrelated economic, demographic and nationalist aspects of her culture. As a result of the Sino-Japanese war of 1894-95, the Russo-Japanese war of 1904-05, the World War of 1914-18 and the Siberian Intervention of 1918-22, Japan expanded to include Formosa, Korea, the Kwantung leased territory, the South Manchuria Railway Zone, Karafuto (Southern Sakhalin), the South Sea Mandated territory, and other smaller areas. In fact, the puppet State

CHAPTER III

DEMOGRAPHIC DANGER SPOTS

Japan, China and India are the three most serious demographic danger spots, in the order of their demographic disharmony from the points of view of both pressure of population on food resources and over-all relation between human numbers and the total available resources. Whether any or all of these countries will within the next twenty or thirty years reach that over-saturation point which would result in a disruption of the peace, it is difficult to say. The dynamics of human behaviour in crowded and less advanced countries are shot through with imponderables and most difficult to predict; they may vary from fatalistic resignation to the direst poverty to a sudden and violent outburst at the slightest touch, giving the lie to both the prophets that minimized the danger and those that exaggerated the difficulty. Nevertheless, it will be useful to survey, however briefly, the major aspects of the population problems in these countries, wherein may lie the genesis of a future international holocaust.

JAPAN

The problem of Japan — politically and economically — is primarily one of increasing population. Her relatively rapid industrial development and intensive agriculture of high yield did not much help her in meeting the increasing needs and demands of a growing population anxious to raise its standard of living. When this situation is underlined by Japan's poverty in terms of essential industrial raw materials such as iron and oil, her demands on the Western Colonial Powers which hold enormous areas, and her recent aggressive, if vain, efforts to solve her population problem

GROWTH OF POPULATION

Between 1872 and 1940 Japan has grown at an annual rate ranging between 1·1 and 1·4 per cent, adding annually about ■ million. This is ■ modest rate of increase compared to the rates of growth of various European countries, especially during the years of their industrial expansion. The population was stabilized around thirty millions when Japan was, like other oriental countries, predominantly agricultural. But with the introduction of machinery and the growth of industrialization, a higher level of living and better food, clothes and housing, the population grew as it was bound to. But once the industrial-urban patterns of living came to stay, the Japanese birth rate, following the experience of Western countries in similar situations, began to decline. "From 1872 to 1920 Japan's rate of growth was less rapid than that attained by England and Wales from 1801 to 1841, but it was rising steadily and by 1920-35 had attained approximate equality with that of England and Wales at this earlier period."¹ When a considerable segment of the population, mainly the industrialized urban population, became jealous of its high standard of living achieved through increased production, it was unwilling to lose the advantage by increasing its birth rate. Here was the familiar conflict between a high rural birth rate and a decreasing urban birth rate. The time lag between the exodus of the rural population into cities and the permeation of urban mores into its pattern of living was not great enough to permit population stabilization, and hence the increasing pressure of population on the means of subsistence. Intensive agriculture soon reached its limit, as the cultivable area of Japan is extremely small ; industrialization had also its limitations for want of coal, iron and oil ;

1. Warren S. Thompson, *op. cit.* p. 94.

of Manchukuo (Manchuria) must be included as part of the Japanese empire, though Japan always considered that region, statistically anyway, as foreign territory. But Japan's territorial annexations are now of historical interest only in so far as the immediate and perhaps temporary economic setbacks resulting from the loss of her colonies are concerned. Hence, the present review of her population problems will be confined to the *homeland proper* and the term "Japan" refers hereafter only to the area of the homeland.

The latest census, that of 1948, taken under the aegis of the occupation authorities, revealed a total population of 78,627,000, an increase of 6,258,000 since V. J. Day, attributed mainly to the repatriation of Japanese nationals from overseas.

The following table sums up the growth of Japan's population according to available statistics :

TABLE 12
POPULATION GROWTH OF JAPAN PROPER *

Year of census or Estimate	Total Population to the nearest 1,000	Percentage of increase from previous figure	Density per sq. mile
1870	35,000,000	—	237
1880	36,550,000	4.43	247
1890	—	—	—
1900	44,285,000	—	299
1910	50,743,000	14.58	343
1920	55,963,000	10.28	379
1930	64,450,000	15.17	436
1940	73,114,000	13.49	497
1945	72,349,000	—	—
1946	73,114,308	—	—
1947	78,600,000	—	—
1948	78,627,000	—	—
1949	82,603,000	—	559
1950	—	—	—

* (Before 1920 and for 1947, best available estimates ; for 1920 and subsequent years except 1947 national censuses).

foreign trade was of no great help because international trade in which Japanese manufactures dominated suffered under preferential tariffs raised by other countries. It may be objected that Korea, Formosa and Manchuria had become a part of the Japanese empire and that the overcrowded Japanese now had emigration outlets. But the nature of Japanese emigration was such that it offered no real relief to the pressure on the soil; the emigration to these areas was different from ordinary emigration as we understand it. The Japanese who emigrated to these "colonial" areas were not, for the most part, agriculturists because they could not compete with the native peasants. As the level of living of the average Japanese farmer was higher than that of the farmers in these areas, the scope of emigration of Japanese peasants and its economic implications became very narrow. Emigration to these areas, such as it was, was chiefly restricted to officials, business men, technicians and white-collar workers. And these areas, it must be remembered, were not empty and unexploited countries as Australia and America were at the beginning of European emigration. The Koreans, the Formosans and the Manchus had tilled and settled the land for centuries. In fact, more Koreans had gone to Japan than Japanese to Korea! Hence, the Japanese emigration, limited as it was in numbers and occupational structure, offered no real solution to Japan's population pressure in the home islands.

FERTILITY

In 1947 Japan's birth rate was 34 per 1000, and death rate 12·3 per 1000, yielding a natural increase of 21·7 per 1000. The rate of 34 per 1000, though not high for an Asian country, is high for a country that lost some of her manpower belonging to the most fertile age group in the recent war and for a country with the limited resources

of Japan since she has lost her empire. This apparently high birth rate has passed through the usual fluctuations in keeping with the phases of her economic history. During the early years of the present century, when Japan passed rapidly through all the stages of an industrial revolution in a very short period, the birth rate fluctuated around 34 and 35 per 1000. As industrialization and urban patterns of living came to stay, the birth rate in the cities in the twenties declined to about 30 per 1000, revealing a remarkable differential between urban and rural rates. In 1921, for instance, the reported birth rate for Japan as a whole was 35·05, but 28·05 for all cities. And when, in 1936, the general birth rate had declined to 29·9 per 1000, the city birth rate also declined to 25·1 per 1000.

This declining trend was not allowed to go unchecked. Once Japan was converted to the militarist ideology of the "co-prosperity sphere" in South East Asia, which simply meant conquest of the greater part of Asia, she could not be indifferent to the declining birth rate. She became a victim of the totalitarian vicious circle of high birth rate, over-population and demand for population outlet ; to bolster this demand, efforts were made to increase the birth rate, and so the circle continued. In the late thirties and early forties, Japan became population conscious, setting the mark of one hundred millions as her goal. Birth control was severely discouraged, though not totally banned. For instance, the *Japan Advertiser*, the Tokyo newspaper in the English language, carried items such as the following through the period of the "China Incident" and the post Pearl Harbour days, down to the day of defeat. In the issue dated 28 January 1941, we read under the caption "Cabinet to Consider Plan for Boosting Japan's Population to 100,000,000 by 1960"—"The Cabinet is expected to-day to approve a plan jointly advanced by the Welfare Ministry

and the Planning Board to establish a policy to ensure a sufficient population for the future development of the Japanese race. At present Japan proper has a population of 64,058,000 which the Welfare Ministry and the Planning Board would increase to 100,000,000 by 1960. Since the present birth and death rates do not insure such a population, the plan aims at reducing the present marrying age of 27 for men and 24 for women, to 24 and 21 respectively. The new standard will make it possible for an average couple to have five children, it is expected. For this purpose authorities plan to work out regulations under which prolific families will be given preferential rights to procure daily necessities ; facilities will be given young persons to marry and efficient measures will be taken to prevent venereal diseases. To reduce mortality rates more protection and care will be extended to pregnant women and infants. The authorities will also see that Japan's population will be so distributed as to minimize unemployment throughout the country."

In March 1940 the ten-year population plan received Cabinet sanction. It was officially stated that "if the Japanese are to be leaders of Asia, they must expand greatly in numbers", and that "the practice of birth control must be driven out, the importance of family and race inculcated and early marriages and plenteous child-bearing encouraged."

There is, of course, an obvious incongruity in a national policy that demands more room for excess population at the same time as it urges its people to reproduce more abundantly. But this irrational programme of a government that on the one hand offers "bribes" and bonuses to the average family to produce more children and, on the other, claims that excess of population is a justification for its territorial expansion, is based on the belief that the condition it seeks

legitimately to remedy must be perpetuated long enough to attract attention.

As a result, the birth rate increased, but only slightly. The following table shows the trend of the Japanese birth rate during the last forty years.

TABLE 13
BIRTH RATE OF JAPAN FROM 1911-1949

Year or period	Birth rate per 1000
1911-13	34.1
1921-25	34.6
1926-30	33.5
1931-35	31.6
1936	30.0
1937	30.8
1938	27.0
1940	26.3
1941	28.9
1945	29.9
1947	34.0
1948	33.8
1949	33.1

With the partial destruction of Japanese industry, the disruption of normal rural and urban life and the laxity of moral standards that follow in the wake of any war, apart from the "Occupation" babies, there seems to be no easy way of reducing the Japanese birth rate, save through Malthusian checks such as subsistence on famine level and increase in mortality. Birth control can, of course, play some part. While the ban on birth control is no longer in effect, it is difficult to foresee how a nation of some eighty millions can be converted overnight to the practice of contraception. It is therefore likely that the birth rate for Japan as a whole may continue at about 40 per 1000 for some time to come.

MORTALITY

The history of the Japanese death rate in the last thirty years follows roughly the Western pattern of gradual decline. Perhaps Japan is the only Asian country which has successfully reduced her death rate to the pre-war level of the United States of America.

Before the first World War the death rate was around 30 per 1000. During the twenties it declined to 20 per 1000 and dropped further down to 18·5 in 1933. In 1939 it was 17·4 per 1000. Though evidence of the declining trend of Japanese mortality during the recent war is not ample, it is known that the death rate fell to 12·3 per 1000 — an all-time low for an Asian country. As everywhere, control over disease and death has responded to increased production of food, better medical and sanitary facilities, the evolution of a social philosophy which places a higher value on the survival of the individual and, above all, a gradual increase in the standard of living. When the government, apart from its enlightened responsibility of providing the best modern medical and sanitary care for its citizens, realized the long range importance of saving and prolonging the life of its manpower, so desperately needed in war, the gradual and yet impressive decline in general mortality in Japan became marked.

The death rate of Japan before the first World War was very high because of the very high infant mortality rate, a feature common to all Asian countries. At first, the death rate for the adult population declined only slightly, and the later marked drop in the general death rate was almost entirely due to improvement in infant care and survival. In 1920, for instance, nearly one-fourth of all babies born in Japan died before they were five years old, which is comparable to the situation in India *to-day*, but in 1930, the number of deaths under five years was less than one-fourth

of the total number of deaths. Therefore, even a small improvement in infant mortality would contribute towards a marked decline in the general death rate, a decline which has been reflected both in an increase for the Japanese expectation of life at birth and an increase in the total population. The following tables on Japanese general death and infant mortality rates bear this out. "In keeping with this decline in the death rate between 1920 and the beginning of the second World War, the expectation of life at birth increased for Japanese males from 42.06 in 1921-25 to 44.82 in 1926-30, and 46.92 in 1935-36; for women it increased from 43.20 in 1921-25 to 46.54 in 1926-30, and 49.63 in 1935-36."² If the wartime mortality of civilians and members of the armed forces is not taken into consideration, the pre-war trend of gradual decline in general mortality is bound to continue. However, the mortality and the fertility for the immediate years to come will depend on the economic and social effects of the American occupation on the Japanese economy. Whatever the American occupation policies may be, the problem of a declining mortality with no corresponding decline in the birth rate is obvious and needs no elaboration.

The following table shows the fluctuations in the birth and death rates in Japan between 1945 and 1949.

TABLE 14

Year	Birth rate	Death rate	Natural Increase rate
1945	23.2	29.2	6.0
1946	25.3	19.6	7.7
1947	34.8	14.8	20.0
1948	33.8	12.0	21.8
1949	33.1	11.4	21.7

2. Irene B. Taeuber and Edwin G. Beal, "The Dynamics of Population in Japan" *Mulbank Memorial Fund Quarterly*, (New York), July 1944.

It is clear that the birth rate registered the lowest figure in the Japanese demographic history on the eve of the cessation of hostilities. With the termination of war the birth rate again increased to its pre-war level.

The gradual and consistent decline in the death rate is obvious from the following table. If anything this declining trend will be more pronounced in the future with the importation of the enviable American ideals of public health and sanitation. The decline in infant mortality will be more pronounced in the years to come. All this simply means that there will be nothing to check seriously the growth of population in the foreseeable future.

TABLE 15
DEATH RATE OF JAPAN FROM 1873 TO 1948

Year	Death Rate
1873	19.6
1883	18.1
1893	22.7
1903	20.4
1913	19.4
1918	26.8
1920	25.4
1925	20.3
1930	18.2
1935	16.7
1940	—
1941	15.4
1945	29.2
1946	19.6
1947	14.8
1948	12.0

TABLE 16

INFANT MORTALITY RATE OF JAPAN FROM 1910-40

Year	Infant Mortality Rate
1910-12	173
1915-17	171
1920-22	167
1925-27	140
1930-32	125
1940	124

JAPANESE AGRICULTURE

Japanese agriculture, like agriculture in all other Asian countries, is carried on entirely without any farm machinery. Almost all agricultural work in Japan from ancient to modern times has been done by hand, and while Japan was the most industrialized country in Asia before the war, her mechanization did not spread to agriculture.

The second significant factor about Japanese agriculture is the decreasing percentage of the total population that is dependent on agriculture as a source of livelihood, as the table below bears out. This does not mean that the total cultivated area has been decreasing through the years. On the contrary, the tilled acreage has been somewhat increasing though the peak was reached before the outbreak of the second World War. Since there is no mechanization of agriculture, one might expect that the per capita yield as well as yield per acre must be decreasing gradually. On the contrary, the yields of many Japanese crops are very much larger than those in many countries where such crops are staple ones, in fact, double and treble the yields in China and India. This means that the best of human effort is put on the available soil to achieve maximum production. Thus,

Japan appears to have reached the limits of her food production capacity when the other factors of her over-all economy are taken into consideration.

By 1940, Japan had brought 15 million acres under cultivation. This represents an increase of only 5 million acres since 1875. When we take into consideration the demand for land, for houses, roads, railways, canals, parks and airfields, the present cultivated area is about the maximum that can be brought under the plough. In Japan unlike India, there is no land characterized as, "cultivable but not cultivated". After all, only a small proportion of land in Japan is suitable for agriculture and, therefore, cultivation is very intensive and requires hard manual labour. The small, scattered and uneconomic nature of the holdings — the per capita holding is about three acres — prevents the use of large machinery, so that most of the tools used in planting and harvesting are simple, age-old tools, no more developed than those used in Indian and Chinese agriculture. And if the total yield is significantly greater than elsewhere in Asia, it is because of double and even treble cropping per annum. "Japan is the country where the stones show human fingerprints, where the pressure of men on the earth has worn through the iron rock. There is nothing in Japan but the volcanoes and the volcanic wastes that men have not handled. There is no getting away from men anywhere: from the sights of men in the open houses or from the shape of their work in the made fields or from the smell of their dung in the paddy water".³ The only way to improve Japanese agriculture is to add more land — land that is not available on the islands!

This does not mean that Japanese agriculture and agriculturists cannot be helped through workable agrarian reform. But the kind of land reform that has been intro-

3. Archibald Macleish, "Japan" *Fortune* (New York) September 1936.

duced under the pressure of the American occupation authorities in 1947 has more political than economic import, since it is intended more to help in the demilitarization and democratization of Japan than in producing more food. The new Land Reform Law abolishes absentee landlordship and improves the conditions of tenancy farming. It does not seek to consolidate scattered and fragmented holdings, as certain Indian Provinces have done, nor does it socialize land ownership. In the words of the directive that went from the Supreme Commander of the Allied Powers to the Japanese Government it was to: "... exterminate those pernicious ills which have long blighted the agrarian structure of a land where almost half the total population is engaged in husbandry". It went on to say that the "more malevolent of those ills was that more than three-fourths of the farmers in Japan were partially or totally tenants, paying rentals amounting to half or more of their annual crops". In the words of Andrew J. Grad, "The Land Reform Law will wipe out all large holdings in cultivated land and a considerable part of smaller land-holdings. It will transfer this land to farmers who cultivate it, at prices which cannot be considered burdensome. Japanese agriculture will be based on a system of small-scale owner-cultivators. Some tenants will remain but conditions of tenancy have been improved, at least on paper.... It would be naive to think that the Land Reform will resolve all of the difficulties from which rural Japan suffers. It is only the first step on a long road, though a necessary step, without which no others can be taken. Strengthening of the democratic farmers' Unions is one such step; co-operation among farmers, giving them the benefits of large scale enterprise, is another; measures to prevent further uneconomic division and sub-division of land, still another. If these and other steps are taken, the Japanese countryside, instead of being a citadel of reaction, may become a

bulwark of democracy. But we must remember that the old forces in the villages have been only weakened, not destroyed, and that it will be a long time before the goals of the Occupation are achieved".⁴ Whatever may be the goals of the Occupation, this Land Reform Law will not increase the area of existing land nor greatly increase the total food production. It is true that more than 46 per cent of the total population, or about 40 million people, derives its living from the land. And of this 37 or 38 million that constitute the agricultural population, nearly 70 per cent, or 26 million cultivators, are landless tenants. The improvement of the lot of these landless tenant farmers is no minor reform. They will take greater pride in cultivation of land they own rather than lease, and both the middlemen and the absentee rich landowner will be abolished. But the ultimate factor, the land itself, cannot perform miracles, for there is a limit to what the land can be made to produce. The productive area of Japan has long been cultivated by the most intensive methods and this reform, while doing justice to a large part of the population, will not increase the intensity of cultivation or increase significantly the food resources of the nation.

INDUSTRIALIZATION

Japan was the most industrialized country in Asia and, as such, was one of the major industrial nations of the world, despite the fact that of the four important basic requisites of industrialization,—raw materials, capital, technological skill and labour, she lacked raw materials. Japan has been very poorly endowed with mineral resources as compared to the United States, Soviet Russia, England or Germany. Japan proper has not sufficient coal and iron ore ; she has no bauxite or magnesium ; she has only a little

4. Andrew J. Grad, "Land Reform in Japan", *Pacific Affairs* (New York) June 1948.

lead and tin ; but she has abundant sulphur, chromium and manganese. It is true that her empire, mainly Manchuria and Korea, supplied most of these mineral deficiencies. Further, whatever she lacked, she could, atleast theoretically, obtain through the normal channels of international trade, though actually she was hemmed in by the autarchic trade agreements of the Western nations and their colonial possessions in Asia.

To-day, Japan is stripped of her empire and rightly so, but her position as a have-not country with limited reserves of basic minerals for industrialization has become worse than before the war. As already noted, Japan has done all that could be done with her agriculture. And so, the only alternative open to her is to intensify her industrialization, which she cannot do without basic mineral resources. Industrialization is of paramount importance in all demographic discussions since it eventually introduces urban patterns of living which not only provide extra avenues of employment to an overcrowded agricultural population, but also lead to a lower birth rate. The importance of industrialization for a country like Japan can hardly be over-emphasized. Through the three decades prior to the second World War, Japanese industrialists and government spokesmen had hoped to find solutions to their economic and population problems in industrialization. This is perhaps a typical expression of such hopes : " Japan does not look to emigration (for the simple fact that all the outlets are closed for racial reasons) to solve her population problems, but to a further industrialization of the country, so that this increase in the number of people in Japan will become not a reason for war, but a means whereby international trade will be increased and a hope for a continental peace strengthened."⁵ But the hope was shattered as the benefits of foreign

5. An editorial in *Japan Advertiser*, 10 Dec. 1940.

trade became more and more restricted for Japan and the climax was the war. To-day, if no other way is found to relieve the pressure of her growing population on her meagre agricultural and industrial resources, Japan will be reduced to a backward agrarian economy, and the people to existing at the Malthusian subsistence level. Such conditions will be dangerous not only for Japan but for the world.

After all, industrialization, however desirable in itself, is not a substitute for the control of population through the restriction of the birth rate. Industrialization in Japan has proved to be a palliative but a successful and badly needed one when it did come about. Industrialization not only increased the output of wealth by increasing goods and services but what is more significant altered habits. A form which changed habit assumed was an appreciation of and a demand for a higher standard of life, which ultimately reduced the death rate. But then, industrialization of any society has its limitations in providing for an ever-increasing population.

MIGRATION

A significant feature of the Japanese population movement is the continuous migration from rural to urban parts of the country. This internal rural exodus began at the turn of the century, when Japan laid the foundations of modern transportation, urbanization and industrialization. It became an accepted pattern of life for the sons and daughters in farming rural families, except those who were to succeed to their parents' places, to leave the village and seek employment in towns and cities. Most of the industrial labour in Japan's cities was thus recruited from rural areas. While the eldest son of an agricultural family stayed behind to get married, look after the aged parents and tend the ancestral altars and acres, the younger brothers and sisters invariably went to the towns and cities in search of

permanent employment. The younger brothers became carpenters, merchants and shopkeepers ; the sisters entered the cotton and silk mills. It is this continuous rural-urban migration that must explain the almost perpetual relative thinness of rural settlement and the remarkable growth of urban population and the *development of cities*. Of course, the birth rate in the urban areas is lower than that in the rural areas, but the rural surplus is syphoned off to the cities where the population is to find ultimate stabilization.

There was, for instance, a great expansion of cities between 1930 and 1940. Between 1930 and 1935—two census years—the total population of Japan proper grew by 4,800,000. Of this number 20 per cent was absorbed by Tokyo prefecture alone, 16 per cent by Osaka and 24 per cent by the five other urban prefectures.

On the other hand, almost all the mainly agricultural prefectures showed only a small increase and in some of them a decrease was even seen, despite the fact that they had a higher birth rate than the urban districts. This does not mean that the Japanese rural areas were being depopulated, but that a large part of the natural increase was being absorbed by the cities, since the countryside and agriculture had almost reached a saturation point, not so much in density as in ability to support the people.

As for Japanese external emigration, it is often contended that emigration as a solution of Japan's population problem has been of no practical value ; not because the Japanese had no migration outlets, but because it was found that they were poor colonists. Before the war, Japan had outlets into Manchuria, Korea, Formosa and certain Pacific islands over which she held mandate. The total number of Japanese overseas, but within the empire, at the outbreak of the war (in 1940) numbered only 32 millions.

This small number of Japanese emigrants cannot be explained in terms of any barrier set up by the receiving

countries, for after all these countries were an integral part of the Japanese empire. The real reason for this insignificant emigration was that the Japanese, accustomed as they were to a comparatively higher standard of living than that prevailing in these countries, could not successfully compete with the natives of Manchuria, Korea and Formosa. An analysis of the occupational structure of the population, including the Japanese settlers in these "colonial" areas, shows that the Japanese dominate in such occupations as government service, transport and business management, which are beyond the range of colonial nationals; and the colonial nationals dominate in agriculture and manufacturing industry where the Japanese cannot compete with the natives, except at the risk of lowering their standard of living. In the same way native Americans could not successfully compete with Japanese Americans in agriculture in California, because the Japanese Americans could do without things that the Americans found indispensable. While the Empire was a source of raw materials and strategic bases, it was of no great help in absorbing Japan's surplus population.

To sum up, Japanese emigration did not begin until after Japan had become imperialistic (the reason for imperialism being partly demographic) and had desired to settle her citizens in conquered territories. However, Japanese emigration on the whole did not prove to be a success, for three circumstances prevented a normal growth of Japanese foreign settlements. The climate of the regions to which the majority went was unsuitable for the Japanese traditional styles of farming, as in Manchuria, or the territory was already densely populated, or the standards of living, and hence the income requirements of competing groups, were much lower than those of the Japanese settlers, as was the case in Korea and Formosa. Political interference also played some negative part, for there is reason to believe

that Japanese insistence on strict government control over the emigrants with its corollary of closed settlements, militated against their success. It sometimes aggravated, if it did not create, antagonism in the receiving countries. Nor can normal processes of economic and social adjustment of immigrant farmers take place where their every move is dictated by the political consideration of a government far removed from the actual day-to-day problems that must be met by the immigrants on the spot. As pointed out in the last chapter, the desire to treat emigrants who had settled abroad still as Japanese citizens was a grave mistake and provoked, naturally, suspicion on the part of the governments and peoples of the receiving country.

However, now that the second World War is over, most of the Japanese colonists from the Asian mainland have been repatriated, making the food and general economic situation on the home islands extremely difficult. Japan's need for emigration outlets is obvious, but when such outlets are provided these points must be taken into consideration: the relative density of population in the receiving country (thinly-populated areas must be preferred), the standard of living of its people; the climatic factor and above all, the willingness of the people and government of the receiving country to forget the past. Now that Japan's colonial possessions have either been granted political freedom or been restored to the nations to which they legitimately belong, there is no other large-scale workable solution to her population problem than that of planned emigration.

FAMILY AND SOCIAL FACTORS

The family in Japan, as in all and particularly in Asian countries, plays a significant part in the development of national attitudes and beliefs towards children, health and work, towards conforming to the accepted traditional pat-

terns, not to speak of its relation to population problems. While the family is the basic social unit, the Japanese family is considerably different from the Western pattern of the family, in that it is usually large and more closely knit, and the members' rights, duties and obligations are clearly and carefully defined. The Japanese family is in a position somewhere between the Hindu joint family and the Chinese family, on the one hand, and the family system of pre-war France, on the other. It is agnatic, consisting of the family head, his wife, the eldest son of the couple, his wife and children and many unmarried children of the head. Thus the normal Japanese family living in one household includes two elementary family units.

The obligations of the members of a family are such that the actions of an individual are not based on motives of mere self-advancement, but on the collective good of the family as a whole. However, this has not been too great a deterrent to individual initiative, for the Japanese have been able to effect a concealed compromise between the conflicting demands of the family unit and the separate needs of its members. The result is that a sense of security and of the importance of belonging is obtained without sacrificing the spirit of adventure, innovation and even revolt that are pre-requisites for any social progress. In this sense, the Japanese family system has preserved the continuity of the traditional Japanese culture without being too rigid to absorb and assimilate various alien and Western concepts, making the family and the nation less vulnerable in the changing modern world. The importance of this flexible attitude in relation to the country's population problem is obvious. Even in times of rigid and aggressive nationalism, the individual Japanese did not lose their appreciation of values that came from the outside. Even when the sabre-rattling military politicians assured them that they were gods on earth, qualms as to the ultimate truth of such pro-

positions were not wanting. Even when the people were encouraged to multiply by a government pro-natalist population policy, the contraceptive habit, such as it was, did not entirely disappear from the upper classes of the Japanese population.

The concept of the family is extremely important to the Japanese, bearing as it does on the perpetuation of the family line from the remotest ancestors through an unbroken chain of births. This feeling is not unique in Japan, for it is shared in equal measure by the people of India and China, except that the institution of ancestor worship has waned in India in the last few decades. Discussing the Japanese family system and ancestor worship, D. C. Holtom writes: "There is an inheritance in the Japanese family system, however, in which the worship of ancestors or at least the veneration of the dead, has an authenticity and a genuine cultural significance that cannot be set aside. The lines here lead back to Confucianism, not Shinto. Regardless of this fact, however, there seems little doubt that the Japanese are conscious of a historical depth to the family perspective not common in America. The Japanese family is not merely an aggregation of people present in physical form on earth at any given time. Belief in the continued existence of the dead in the spirit world is deep, and even when it is absent, custom is strong. The spirits of the dead must be honoured by symbolic presentations of food and drink — once they were fed that way. They must be kept informed of the important happenings among those left on earth, especially of births and marriages. They are present at the family council and ever watchful from the spirit world, standing by ready to help in the crises of precarious mundane affairs. These aspects of belief in the powers and needs of the family dead are in no danger of violation at the hands of Western culture on the religious side. If they are washed away, it will be by a wave of secularism to which

Japan herself has contributed."⁶ The Japanese family seems to be groping for its lost moorings in these post-war years. It is not known whether or not this instability is due to the thin veneer of Americanism superimposed by the occupation authorities or to a wave of secularism of Japan's own making. Nevertheless, serious dangers are involved to the cultural milieu of any society by attempts to tamper with its traditional concepts of the family either as a method of stabilizing the population or of curtailing the birth rate.

BIRTH CONTROL

While rule-of-thumb methods of controlling conception have been known in Japan from time immemorial, the spread of contraception in the modern scientific sense did not receive any impetus till the first visit of Mrs. Margaret Sanger to Japan in 1922. The government's attitude at first was one of indifference, but it took notice of Mrs. Sanger's second visit in 1936, especially as she had converted an outstanding Japanese feminist leader, Baroness Ishimoto, to her cause. The Baroness addressed meetings of low-income groups, such as miners and shop-keepers, and finally persuaded the Tokyo officials to allow her to open a birth control clinic. But the clinic was closed in 1937 when the war for empire got under way, and the government adopted a policy of "more sons for the empire." The Baroness herself was arrested for radicalism, and the curb on the free dissemination of birth control information and the sale of contraceptives was tightened as the demands for both propaganda and warfare necessitated a pro-natalist policy. Contraceptives, especially since they were manufactured in Japan, did not disappear, but the sales became furtive. All this has now been changed for under the occupation authorities birth control, and even abortion, have been legalized.

6. D. C. Holtom, *Modern Japan and Shinto Nationalism* (Chicago, 1947) p. 211.

Birth control clinics have been opened and are supported to-day by leading Japanese medical men, social scientists and publicists. While this is very welcome, birth control alone cannot solve Japan's population problems, for it will not take care of those already born and, further, it will take years for the practice of birth control to permeate every stratum of Japanese society. True, along with industrialization and emigration, it has a vital role to play in solving the population problem, but it cannot alone accomplish miracles.

FUTURE

Japan's economic and political future depends to a large extent on the solution of her population problem. Before the second World War Japan was able to feed her millions on a limited area through years of industrial development and colonial exploitation. Now her empire has disappeared and with it the colonial raw materials and the preferential market. Some millions who found sustenance and shelter abroad have been repatriated adding to the growing population on the home islands. The age pyramid of the present population is such that the numbers are bound to increase for at least the next three decades, other factors remaining the same.

Now that Japan has become politically free despite the limitations of the Peace Treaty, it is difficult to foresee what the Japanese government proposes to do about this problem. There is of course the Revised Eugenics Law which authorizes the establishment of marriage consultation bureaus, the dissemination of advice and information on contraception and the legalization of abortion for economic, social and legal reasons. Secondly, Prime Minister Shigeru Yoshida has made a public announcement that his government is in favour of birth control as a possible solution to Japan's population problem. In addition to this, the Popu-

lation Problem Council in the Cabinet was established on April 15, 1949. A sub-committee of this council, on population adjustment, recommended in November, 1949, as follows: "In order to prevent a sharp increase of the population which will have adverse effects on the economic reconstruction and promotion of public health in this country, and also to bring a sound and cultural life to realization, it is considered necessary to furnish married couples necessary information on contraception to rationalize measures therefore and to give guidance to the public for the spread of contraception to all classes of our nation, so that married couples can regulate the number of births freely and voluntarily by means of contraception control."

Japan's population problem is at once an economic, social, cultural and political problem. No single remedy can solve it. If all the "solutions" discussed here are applied simultaneously with international assistance and co-operation, Japan might cease to be a demographic danger spot in the near future.

However, in the light of the data presented in the foregoing pages, the only real and short-range as well as long-range alternative seems to be emigration. Even the widespread adoption of birth control and with a reduced rate of increase of 12 per 1000 or about 1,080,000 a year, Japan's population would still be at least 90 million in seven years, and probably far higher. The Japanese themselves are openly advocating and pleading for emigration outlets. Dr. Ayanori Okazaki, Director of the Population Problems Research Institute, Tokyo, recently agreed that "birth control is of the utmost importance" but hoped for "an ideal arrangement in which emigration and birth control could be carried out simultaneously". Hitoshi Oshida, when he was Prime Minister, expressed his hope "that an understanding world will permit some volume of migration to the southern regions". The Japanese migration proposals are not with-

out support from influential individuals and institutions in the United States. Dr. Warren S. Thompson, who studied the Japanese population problems for several months in Japan on the invitation of General MacArthur, pointed out in the course of an open letter to the Japanese press in June 1949, "I can see no justice in the holding of lands out of use by colonial powers; but even more weighty in the determination of national policies in my judgement is that there is no physical possibility of preventing the crowded people of the world from taking these lands sooner or later".

CHINA

Any factual analysis of Chinese demography must be a hazardous, if not an impossible, undertaking, for the primary source material, like census reports and vital statistics on which a social scientist depends, are totally absent in China. No census of the entire Chinese population has ever been taken, that is, a census in the modern scientific sense of the term. Of course, China does possess a long and unbroken record of population estimates as in such historical records as *T'ung Tien*, *T'ung K'ao*, and *T'ung Chi* but they are of no practical value in the sense we understand the term "population estimate" to-day. Chinese vital statistics, though published occasionally in modern times, suffer from a myriad lacunae and are consequently devoid of any scientific content. In the face of this statistical desert, even the most elementary and fundamental facts of Chinese formal demography have become controversial as they are based on mere speculation. For even the total population numbers of China, we have as many guesses as there are writers on China, the correctness of the figure depending on the shrewdness or the intelligence of the guess. So the only oases on which one has to rely are limited observations, general impressions, and indirect evidence. We are therefore confronted by hundreds of reports full of "facts", facts

that are no more than reasoned guesses. It is thus possible to find, on the one hand, no agreement at all on certain "established trends" and, on the other hand, a consensus of opinion on "facts" without any real evidence to support them. And only recently the idea of sampling human population in China, as for instance, the census of the Kuming Lake region in 1942 has been mooted. In view of this difficulty, any analysis of Chinese population problems is bound to be of limited value. But the importance and bearing of Chinese general economic and population difficulties (affecting as they do a large segment of the world's total population and area) on Asian and world peace are so obvious that some attempt must be made to understand their cumulative significance.

SIZE AND GROWTH OF POPULATION

It is therefore not surprising to find that nearly fifty estimates of China's population are available. These estimates, made by both Chinese and foreign scholars and organizations, differ by a wide margin, the highest estimate differing from the smallest by at least 200 million.⁷ But it has become customary, for no scientific reason, for Westerners to use the figure of 350 million, while the Chinese prefer the larger figure of 450 million. "According to the Ministry of Interior, the estimated population of China in March, 1945, was 454,928,992".⁸ It is not known how this figure was obtained, but no matter what figure is chosen, the thesis of this study that China cannot take care of her present population even at the present miserable standard of living will not be materially affected. The figure of 450 million for the population of all China, as a working figure, has been accepted by the International Institute of Agriculture, the International Statistical Institute and the Economic

7. Ta Chen, *Population in Modern China* (Chicago, 1946) p. 3.

8. *China Handbook* (New York, 1947) p. 15.

Section of the League of Nations. The Statistical Office of the United Nations gives probably the best estimate when it offers 463,198,000 for the population of China in 1947 (including the 22 provinces proper plus Formosa, Jehol, Manchuria, Sinkiang and Tibet). Tibet, of course, should be excluded as it does not belong to China, but the population is small enough not to make any difference. It must be pointed out that the United Nations figure is for a larger total area, for it is not old China proper but includes Manchuria, Formosa and other territories that have been restored to Chinese sovereignty after the second World War. Considering that an estimate prepared by the State Department of the United States Government as 430 million for 1950, the United Nations figures for the larger territory, though based on Chinese official sources, may be accepted. Of course, all these estimates involve assumptions and suppositions which cannot be subjected to any statistical scrutiny, for these figures are not comparable in year, area or in the methodology of arriving at these figures. Thus, the population of China, including the new territories, may be taken to be about 450 million. The growth of China's population during the last four decades according to various authorities is summarized in the following table.

TABLE 17
CHINA'S POPULATION GROWTH (ESTIMATES) 1909—1949

Year	Population (in thousands)	Sources
1909-11	368,147	Ch'en Ch'ang-heug in <i>The Chinese Year-Book</i> , 1935-36.
1932-33	429,494	Wang Shih-ta in <i>The Chinese Year-Book</i> , 1935-36.
1944	454,666	<i>Statistical Abstract of the Republic of China</i> , 1947, pp. 6-7.
1946	455,592	<i>Statistical Abstract of the Republic of China</i> , 1947, pp. 2-3.
1947	461,006	Census Bureau, China, August, 1947.
1949	463,500	Statistical Office of the United Nations.

As for the growth or decline of the population during the last half a century, we have of course no evidence. But what are the factors that favour the growth of a population? Have such factors been present in China for more than a brief period? Answers to these questions might help in finding an answer to the question of Chinese population growth.

One primary prerequisite to the normal growth of population in the sense of excess births over deaths is peace and political stability, if these can be defined as the sum total of averted wars. But China has known no peace during the last forty years at least. The interminable civil war which has now apparently ceased with the establishment of a People's Republic (1950), the Japanese aggression through the second World War, not to speak of countless little rebellions and revolts that have preceded and succeeded the founding of the Republic in 1912 — all these have given no breathing spell for the nation. Secondly, there should be adequate, if not abundant, food for the population to grow, but hunger in China has been a chronic condition and not an emergency. As adequate and uninterrupted production is normally a feature of peaceful times, China does not produce all that she needs or is capable of producing. It is notable that in the history of China no great upheaval has occurred without its concomitant of famine. The outbreak of famines, sporadic though they may be, has acted as a vigorous check to population growth. It will never be known how many millions have died in all these famines since the beginning of this century. Famines lead to epidemics and pestilence. Chinese standards of public health and hygiene are so low that these calamities take a regular toll. As long as filth is not under control and the danger of communicable diseases is ever present, the death rate cannot decrease enough to permit any significant increase of population. No matter how high the birth rate,

the population cannot have registered any great increase, comparable to that of India between 1931-41 for instance, especially as there is no immigration into China. To these must be added the primitive state of transportation in China. In fact, there has been some emigration to foreign countries whenever the barriers have been lifted.

As observed in the first chapter, China belongs to the first stage of the demographic cycle by virtue of the stationary nature of her population. This relative stability in numbers and the slow growth of population would put China in the same category with certain demographically advanced nations of North Western Europe. But the fact, however, is that while these advanced countries have reached this stability through low birth and death rates with an industrialized economy and a high standard of living, China has reached this "stability" through wastefully high birth and death rates. China is therefore on the same level as Africa and other undeveloped countries where nature has its own way and man's control or interference, if any, amounts to little.

FERTILITY AND MORTALITY

In the last thirty years, vital registration has been carried on only for random samples of population. The results are at best a rough clue to what the fertility and mortality rates for all China could possibly be. In Chang-kung, Yunnan, the birth rates between 1940 and 1944 have varied between 8.1 to 47.4 per thousand. The average for the whole registration period was 24.9 per thousand. In the province of Shansi, in the twelve years between 1912 and 1923, there have been violent fluctuations in the birth rate ranging from 62.5 to 12.3 per thousand. It is difficult to break these figures down between urban and rural areas and an average of these figures may not have any serious significance. Certain figures for cities such as Nanking,

Shanghai, Canton, Hankow and Hangchow are available and these also reveal equally violent fluctuations and no urban fertility trend as opposed to national or rural fertility trends can be established. In 1933, the birth rates for these cities ranged from 13·9 to 34·0 per thousand. On the basis of the available evidence in 1934, Dr. Ta Chen estimated the national birth rate of China to be 38·0 per thousand of population. Dr. Thompson, after a careful examination of the available evidence, sums up thus: "It seems reasonably certain that the birth rate in China is not under 40, and my belief is that it will average as high as that recorded for Formosa (45·6) and possibly even higher. The data on the death rate are even less consistent than those on the birth rate, but seem to justify the statement that the death rate probably seldom falls below 35 and then only under conditions quite exceptional in China, such as in a small area where there is some health work or in a "good" year when the harvest is abundant and epidemic disease is mild. Furthermore, the death rate in China is highly variable from year to year and from place to place. This violent fluctuation, much more violent than the fluctuation in birth rates, is probably characteristic of all populations which, like that of China, have practically no health service and live close to the subsistence level even in "good" years."

AGRICULTURE

No survey of Chinese agricultural land has ever been undertaken and hence (as in everything else Chinese) one cannot be too dogmatic about the total available tillable land, and the portion of it that is cultivated and the possibilities of increasing this area. Dr. Lossing Buck has estimated that about 340,000 square miles constitute the cultivated area in China. If this estimate is correct, it means that the

Chinese have brought under the plough 25 to 27 per cent of the land in China proper. Since about 300 million peasants have to eke out a subsistence existence from this limited area, the high density and the great need to bring additional land under cultivation become obvious. But if the remaining 73 per cent of the land is equally fertile or equally accessible to the traditional patterns of Chinese agriculture, this major land area, presumably, would not be remaining idle. The reason is that the Chinese, unlike the Japanese, ignore the cultivation of patches on nooks, corners and slopes of hills. With a few exceptions, the Chinese peasants have confined their farming to alluvial soil of the plains and valleys. When it is remembered that China is a mountainous country with a relatively small area of plain surface and that the Chinese are unwilling to cultivate mountainous slopes and hill tops, not to speak of frontier areas, the overwhelming crowding of Chinese peasants on a small area is no surprise.

Despite the limited area that China has brought under cultivation, the Chinese peasants have tried to make the best possible use of the land, in the light of the traditional knowledge about agriculture available to them. The staple crop is rice (in the North it is wheat but its cultivation is relatively less), and it is intensively cultivated by hand. Unlike the Indian farmers, the Chinese do not resort to fallow periods to conserve the fertility of the land. They cultivate the land every year and like the Japanese they raise two or even three crops in a single year. They do not adopt crop rotation but usually cultivate the same crop year after year. Though the soil needs replenishment they do not use much farm yard manure, not to speak of commercial fertilizers that the American farmers use so much. They use night soil and green manure. And they have evolved the use of composts which yield a large quantity of humus. Though the Chinese peasants have not adopted modern

methods of scientific farming, they have been able to preserve the fertility of the soil through the ages through patient and laborious manual labour. This does not mean that land cannot yield more or that Chinese cultivation has no possibilities of improvement. Total agricultural production can certainly be increased by better farming practices, better seeds, crop rotation and utilization of commercial fertilizers. All this means money and, what is even more difficult, breaking the cake of custom. Farmers all over the world are conservative and offer obstinate resistance to reform, and the Chinese are no exception. The illiteracy of the farmers, the lack of a stable central government till recently (interested in the dissemination of modern scientific agricultural knowledge), and the absence of livestock farming in their agricultural tradition are serious obstacles to agrarian reforms. But if the tremendous rural density is to be lessened and some improvement in the standard of living is to be effected, certain reforms such as the adoption of livestock farming (Chinese consume little milk and milk products), and orchard growing (Chinese eat little fruit), prevention of deforestation practices (Chinese, like ignorant farmers all over the world, are reckless burners of forests), and the introduction of a better and more varied diet, and above all, the cultivation of the unused uplands are imperative. All these reforms, tremendous tasks as they are, must be pioneered if the Chinese civilization is to survive, not as a ghost of its ancient self, but with some strength, stability and dignity.

The Belgian geographer, Gourou, discussing the possibility of utilizing China's unused uplands, speculates that nearly sixty million Chinese can be supported if only 70 per cent of this land is put into use. He estimates: "It may be of interest to try to evaluate, in very schematic fashion, the possible effects of a new disposition of China's abandoned lands. One square kilometer, newly reforested,

would support 10 persons; if, therefore, one per cent (35,000 sq. m.) of the total area of China were reforested, useful employment would be provided for 350,000 persons. One square kilometer under orchards could provide an adequate living for 100 peasants; therefore, if 10 per cent of the national domain were under orchards, it could support 35 million peasants. One square kilometer of grassland could support 20 to 30 livestock farmers; if one per cent of the total area were under grass, it could thus support approximately one million persons. Accordingly, if 10 per cent of the total area were reforested, 10 per cent transformed into orchards and tree crop plantations, and 20 per cent into grasslands, some sixty million settlers could be attracted to the new enterprises and thus be drawn off from the 300 million peasants who are to-day crowded into the cultivated land. A considerable proportion (33 per cent) of waste land would still remain."¹⁰ True, this sounds fantastic and impossible, but with a strong and stable central government interested in the welfare of the people, this and more can be done in about twenty years.

The pressure of population on agricultural resources to-day, however, has reached incredible proportions. Some astonishing densities have been calculated within various regions of China. Walter H. Mallory, of the China International Famine Relief Commission, gives an unusually high estimate of 6,880 persons per square mile in a Northern famine region. J. L. Buck estimates the density of the South-Western rice area at 2,636 per square mile. These figures are considerably higher than any recorded for similarly crowded agricultural areas either in India, Japan or Indonesia. Even if the density for all China is considerably less

10. Pierre Gourou, "Notes on China's Unused Uplands", *Pacific Affairs* (New York), Sept. 1948, p. 235.

than these figures, there is reason for despair unless something drastic is done to relieve this devastating congestion. How can China, with one-third less land under cultivation than the United States, produce enough to feed a population more than three times as large?

China, which is passing through another one of her periodical political upheavals, will no doubt survive politically, but it is hoped that the "new democracy" will mean more economic amelioration to the earth-bound masses that constitute the backbone of the Chinese population. It may be hoped that those students of China who think that the present Communist revolution is nothing but an agrarian reform movement are right, and that China is on the threshold of great reforms so that the Chinese may be assured in the years to come, of at least the irreducible minimum requirements of civilized human existence.

Who knows, the new government which is so conscious of the need for agrarian and other economic reforms, might be able to do it once it is firmly established in power.

INDUSTRIALIZATION

The importance of industrialization for a country like China cannot be overemphasized. As a source of lucrative employment and sustenance to her now underfed and unemployed millions, and as a key for the stabilization of her population growth, there is nothing to beat industrialization as a principle of social reconstruction. And yet China's development is far behind that of India or Japan. In fact, for a country of her size, manpower and available raw materials, she is the most unindustrialized country in Asia. The causes for this backwardness are not far to seek. The absence of a strong central government with any avowed plan or policy of industrialization for well-nigh half a century, is the most important cause. Such governments as China has had in her chequered history were so saturated

with vested interests as not to think seriously of the welfare of the country as a whole and much less of the man in the street. Chinese nationalism has been of such a calibre that it was, though vociferously anti-something or other, never actively pro-something. It is significant that India, which was occupied for nearly two centuries by the British who vigorously discouraged industrialization, became more industrialized than China, which has been a sovereign country, in name at any rate, from ancient times. To begin with, she had no visible opposition to stimulate her. China's semi-sovereign status has had a great deal to do with her lack of industrialization. The Western Powers, just as much as Japan, were anxious to keep her in a "colonial" status as a supplier of their raw materials and as a market for their manufactured goods. The extreme individualistic nature of the Chinese (this does not contradict their concept of family or class) and the subsistence farming resulted in no saving over current consumption. This resulted in want of capital resources and the delay of emergence of capitalism as we understand it. There was no business or commercial organization indigenous to China, as there was in India, which could act as a forerunner to the modern joint stock companies of limited liability. Along with India and Japan, she also suffered from a tremendous paucity of trained personnel. While Japan sent thousands of her students abroad at the turn of the century to learn modern techniques and while India later caught on to the technique of "going to England for higher studies", China was a latecomer to this field, and even then the proportion of returned scholars to the total needs of China was low. All these and more have been responsible for China's retarded industrial development.

But what are China's possibilities of industrialization now? Does she possess the necessary requisites for industrialization? China has had no complete geological survey

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she develops her now primitive internal transportation system. As for capital resources and technological skill, she is strikingly deficient, but once political stability is established, China may be able to borrow from the United States, as she has done in the past, and perhaps from Soviet Russia, India, and Japan capital and technology, and exchange her products such as they may be for raw materials. Though the prospect for industrialization does not appear to be bright, there is no need for pessimism, for China may follow the example of Soviet Russia and transform her economy in less than a quarter century. What she has been able to achieve in her already developed textile industry, she must be able to do in other industries subject to the limitations already noted. China can now turn to the one great living example of the rate at which an underdeveloped country can both build the implements of modern civilization and learn to use them—the example of the Soviet Union. Should China plan her economy after the Soviet model, she may well become in two decades a planned, industrialized nation; that is, if she can control her population growth.

But, if communist China follows the Soviet model and looks at the population question in Marxist terms, her massive population is bound to grow and continue as the chief obstacle in the path of her industrialization. As the Rockefeller group of experts who recently examined this question reported, "It appears most unlikely that China will ever become a leading industrial nation in the sense that non-agricultural pursuits can occupy, for example, two thirds of the labour force. Apart from all other obstacles, China's huge population makes it inconceivable that she could follow Japan's example of purchasing food and raw materials with the receipts from manufactured exports in sufficient quantity to convert herself into an industrial nation. We may conclude that China will remain pre-

of her land area and hence any estimate of her mineral resources can only be of doubtful value. But the available information (though this may be an under-estimate) belies the oft-referred "China's abundant mineral wealth". China's coal reserves seem to be adequate for her normal needs for a long time to come. They are of varied quality and are unevenly distributed, but no area is beyond easy access to coal. As for iron ore, Dr. Fong thinks she has "a reasonable reserve of iron ore",¹¹ while Dr. Thompson thinks that "China is poor in iron" and quotes Bain to the effect that "the evidence would seem to be conclusive that there is no warrant in present knowledge for the expectation that China will be able to supply iron ore that will contribute to the world's exportable surplus to any considerable degree or even that China can support for any long period a domestic industry consuming steel per capita at a rate comparable to those in Western countries."¹² China is also deficient in copper and oil. Foster Bain observes that "making allowances for deficiencies in present knowledge of the economic geology of China, its oil reserves are still probably less than one per cent of those of the United States."¹³ Nor does she appear to have any considerable amount of sulphur or pyrites to develop her chemical industries. But China has considerable amounts of bauxite, antimony and tungsten.

This inadequacy of mineral resources does not mean that China can never industrialize her economy, but that she must be able to exchange the exportable surplus of whatever commodity she may have in return for a supply of these minerals. Even then she may not become a major industrialized country, even according to Asian standards, until

11. H. D. Fong, *Post-war Industrialization of China* (Washington D.C., 1942) p. 3.

12. Thompson: *Op. cit.* p. 195.

13. H. Foster Bain, *Ores and Industry in the Far East* (New York, 1933) p. 32.

the enormous social burden on the individual toward his kith and kin in the two worlds can be easily imagined. The normal desire for parenthood, (when there are no alternative and competing values as in Western society such as a baby versus a Baby Austin complex) is whetted by the existence of ancestor worship which gives parents an additional incentive to have sons to perform the rites, and thus secure for their parents and grandparents life eternal. Says Mencius: "There are three things which are unfilial and to have no posterity is the greatest of them". And "sentiment, hallowed by immemorial tradition, makes it a duty to leave sons, and the communism of the patriarchal family dissociates the production of children from responsibility for their maintenance. Hence prudential restraints act with less force than elsewhere; and population, instead of being checked by the gradual tightening of economic pressure on individuals, plunges blindly forward, till whole communities go over the precipice".¹⁵ Thus the by product of ancestor worship is an increased birth rate which is bolstered further by the institution of polygyny. In an agrarian country of grave political instability, efforts to secure personal social security are of some importance for, after all, as the Chinese saying goes: "Grain is stored against famine and sons are brought up against old age". The children in a rural economy are a great solace, especially when they help the parents in their numerous chores in the home and the field. The earlier one has them, the better it is, and hence early marriage. Remembering the high death rate consequent upon famines and epidemics, it is necessary to call many so that a few may be chosen to survive. And hence polygamy and concubinage. If there is less to eat for everyone, it is not wise to cut the number, for every mouth brings with it also a pair of hands. But

15. H. Tawney, *Land and Labour in China* (London, 1937), p. 104.

dominantly an agricultural country at least for many decades.¹⁴

THE FAMILY AND SOCIAL FORCES

To-day the social milieu in which the Chinese population lives, moves and has its being is so typically Asian in its character that it aggravates further the demographic dilemma of China. The widely prevalent family pattern (whether it is the conjugal, the stem or the joint family) is such that it puts a tremendous burden on the head of the family in rearing and caring for a large number, irrespective of one's ability or inclination to do so. The network of duties and responsibilities of the family is such that any evasion is impossible, and individualism has no place in it. Communalism and nepotism are not anti-social vices but desirable props on which the primary social unit rests. Chief among the main functions of the family is ancestor worship; and the relation of this social institution to population growth is obvious. Ancestor worship in the simplest terms implies, much as in Japan, that the ancestor is not entirely dead, that his soul continues to live and wander, and above all, watches over the life of his descendants. Thus the ritual is based on the idea that those who perform it help both the living and the dead. An ancestor living in the realm of the dead is believed to possess supernatural power which he may use to help his descendants. The dead ancestor is believed to be better off when he is kept "alive" in the regions beyond through worship than when his existence ceases altogether. Otherwise he may have to wander in the world as a "ghost", as happens to those who have no descendants. When this institution is coupled with the disadvantages of the joint family system,

14. M. C. Balfour, R. F. Evans, F. W. Notestein and I. B. Taeuber, *Public Health and Demography in the Far East*, (New York, the Rockefeller Foundation, 1950), p. 73.

only herself to look after, and who consequently manages to look neat and tidy, while the Chinese man is like the daughter-in-law of a big family who has a thousand and one household obligations to attend to. It therefore breeds in us soberness at an early age. It keeps our young in their places. It overprotects our children and it is strange how few children rebel and run away. Where the parents are too self-centred and autocratic, it often deprives the young man of enterprise and initiative, and I consider this the most disastrous effect of the family system on the Chinese character. A parent's funeral interferes with a scholar's chances at the official examination for three years, and is good ground for resignation of a cabinet minister".¹⁶

These high fertility and mortality rates, yielding a low survival rate, contradict the widespread popular belief that the average size of the Chinese family is extremely large. The available evidence, however, shows the family size to be normal, even in relation to the size of families in Europe. Whatever might have been the size of the Chinese family in the pre-Republican and Empire days, it is not large to-day, at least by Asian standards. Here again we have no undisputed statistical authority for all-China, but we have several sample surveys as well as estimates for certain years and regions. As the difference between these figures is not unreasonably large, an arithmetical average of these figures may be taken to be roughly the fact to-day.

In China, a difference is made between a family and a household. A family generally denotes "a group of persons living together as a unit who are related to one another by blood, marriage or adoption". By a household is meant a group of persons living together under a common economic arrangement, which includes in addition to the family, those who are not otherwise

16. Lin Yutang, *My Country and My People* (New York, 1939), pp. 176-77.

it is forgotten that while the mouth begins to function *from* birth, the hands will take at least ten or fifteen years. This simple chain of cause and effect, without the influences of any extraneous and complex factors, accounts to some extent for the tragedy of China's high birth and death rates.

Lin Yutang, the Chinese writer, sums up the Chinese family system in a way which sounds like an echo of the Hindu family system. He writes: "There was formerly no such word as "family system" as a sociological term; we knew the family only as 'the basis of the state', or rather as the basis of human society. The system colours all our social life. It is personal as our conception of government is personal. It teaches our children the first lessons in social obligations between man and man, the necessity of mutual adjustment, self control, courtesy, a sense of duty, which is very well defined, a sense of obligation and gratitude toward parents, and respect for elders. It very nearly takes the place of religion by giving man a sense of social survival and family continuity, thus satisfying man's craving for immortality, and through the ancestral worship it makes the sense of immortality very vivid. It breeds a sense of family honour, for which it is so easy to find parallels in the West.

"It touches us even in very personal ways. It takes the right of contracting marriage from our hands and gives it to those of our parents; it makes us marry not wives but 'daughters-in-law' and it makes our wives give birth, not to children but to 'grand-children'. It multiplies the obligations of the bride a hundred-fold. It makes it rude for a young couple to close the door of their room in the family house in the daytime, and makes privacy an unknown word in China. Like the radio, it accustoms us to noisy weddings, noisy funerals, noisy suppers and noisy sleep. And like the radio it benumbs our nerves and develops our good temper. The Western man is like a maiden who has

rural exodus is a continuous phenomenon providing seasonal as well as permanent employment in the cities to the under- and-unemployed but overcrowded rural population. There is no way of estimating the volume of this migration.

The second type of migration is peculiar to China and those countries which have passed through painful forced migrations as a result of war. While the rural-urban migration is motivated by economic factors like desire for employment, higher wages and better social conditions and amenities, the forces behind the war-time migration were the compelling desire for safety and security from bombing and other horrors of modern warfare akin to the forced Indo-Pakistan population transfers after the partition of India. There was also the desire to escape conscription and slave labour likely to be imposed by the conquering and occupying armies and authorities. The pattern of this migration was set by and began with Japan's undeclared war, the so-called China Incident. After the outbreak of hostilities at Lu Kou Chiao, south of Peiping in 1937, the Chinese who had the strength and resources began to move into free and unoccupied China. As the area under the Japanese control began to grow, the volume of southward migration correspondingly increased. Unlike the migrants in the first category who were mainly unemployed and distressed agriculturists seeking new jobs in the cities, the war-time migrants were relatively well-to-do people who belonged to all types and professions. They were mainly the educated and the politically articulate and those who were likely to be *personae non gratae* with the Japanese armies. This has included at times schools and universities complete with teachers and scholars. This mass emigration grew tremendously in volume with the Japanese attack on Pearl Harbour on 7 December 1941, and the transformation of the China Incident into a global allied war. The total number of these migrants from occupied and war-torn areas

related to each other. The household is the same as the economic family. Thus a group living on a farm is a family if its members are related to each other by blood or marriage. It becomes a household if it has, in addition to the members above mentioned, a farm labourer who works and lives with the farmer-employer.

According to a statistical survey carried out by the Chinese government in some 22 provinces in 1934-35, the average size of the Chinese family was 5.5, the average size of the peasant family being only slightly higher, i.e., 5.9. The population covered by this survey was about 180 million or nearly half the population of China and so, the figure 5.5 can be taken as the average size of the family for a large sample. According to Dr. Buck, the average size of peasant families in North China was 5.5 and South China 5.0. Olga Lang, in her survey of some 5,000 families in Hopei province in 1931, reached the number 5.8. A Yenching University survey of the under-privileged section of Peiping, involving about 1,000 families in 1932 gave 4.2 as the average size of the family. All these point to the fact that the size of the average family is not unusually large, but the point that is not obvious is that this moderate figure has been obtained through an enormous human wastage of many births and many deaths. The moderate size can still be obtained if the birth and death rates are proportionately lowered, assuring a high survival value to every Chinese child.

MIGRATION

Chinese migration, from the turn of the present century down to the present day, falls distinctly into three categories. The first is the rural-urban migration which is a characteristic feature of migration in all agricultural countries that are being gradually industrialized, as in India, Japan, and other Asian and Western countries. This

square miles yields a low crude density of less than 90 persons per square mile. The total area of cultivated land is estimated at about 42 million acres and the total cultivable area at about 102 million acres. With such a low density and with three-fifths of the tillable area lying idle, the prospects of settling at least a few million Chinese farmers, if sufficiently planned and organized, should not be dim. "Manchurian soil is said to be among the richest in the world, and the principal crops are soya beans, kaoliang, millet, maize and wheat. Nor are large forests lacking in China. In fact, the Japanese were aware of these possibilities for they planned in 1936 to settle a million Japanese families within twenty years. The known possibilities of Manchuria are such that one authority believes that "from the standpoint of agricultural production alone, Manchuria can probably support a population of 100 million or more at current levels of living".¹⁷ The Chinese themselves are not unaware of this relatively empty agricultural land. In the decade before the second World War, about a million migrated annually to the Liao, Nun and Hailung river valleys in Manchuria. With the beginning of the Japanese invasion in 1937, this migration ceased and about 40 per cent of those who had emigrated earlier returned to their homes in Central and Southern China.

Then there are areas in the North-West in Sinkiang and Inner Mongolia which have not been exploited fully. These regions have not even been surveyed exhaustively. Once a strong central government and political stability are established, a planned internal movement of population to relieve the population pressure and assure a better standard of living to the people in the congested provinces of the South can be engineered. But about this land in the North-West frontier, Dr. Ta Chen writes: "In the north-west

17. As quoted in Warren S. Thompson, *op cit.* p. 251.

to unoccupied China between 1937 and 1945 has been estimated at about 10 to 14 million, or about 50 per cent of the adult population of the occupied urban areas — an unprecedented wave of migration, when the primitive means of transportation and the unhappy and unplanned nature of their departure and arrival are taken into consideration.

The third type of Chinese migration involves all those emigrants who left China for countries beyond her land frontiers and overseas; that is, they include those who emigrated not only to South-East Asia but also to the rest of the world. For some fifteen centuries, the Chinese have emigrated from the coastal provinces, chiefly Kwantung and Fukein, to mainly the lands and islands bordering the China Sea and the Bay of Bengal. Of the estimated ten million Chinese overseas, nearly five million live in South-East Asia. The intense economic competition among the various ethnic groups, the "national solidarity" of the Chinese abroad and the claim of the Chinese Government, under the operation of the *jus sanguinis*, to have jurisdiction, in theory at least, over all persons of Chinese blood, have led to acute political, economic and social difficulties in the past. The resurgence of nationalism in South-East Asia has only led to a realization of the difficulties of the Chinese immigrants in these areas.

It is not necessary for our present purpose to review the genesis and growth of the Chinese emigrant communities in all these countries. The point here is whether there are avenues for internal and inter-provincial migration and the possibilities for emigration to such countries and regions that may be willing to receive them on a large scale, in the future. Now that Manchuria and Formosa have been restored to China, the movement of Chinese to these areas must be treated not as emigration but as inter-provincial migration. The population size of Manchuria to-day is uncertain, but it is doubtful whether it could be more than 45 millions. This population in an estimated area of 503,013

political mission. It may be that this very refusal on the part of North and South American countries may serve as a wedge to widen the ideological gulf that has already come into existence between communist China and the "Capitalist" American Republics. As for the Chinese, whether they are communist or Koumintang, the imperative need for not losing face will be great. But with the military power that a communist China is likely to build up with the aid of the Soviet Union against the possible, if hypothetical, showdown that may come between American-sponsored Japan and Soviet-aided China, the people of China can demand some relief for her teeming millions in thinly populated countries like Australia, Canada and Brazil. When such demands, irrespective of their logicity, can be buttressed with some show of force, either concessions may be granted or international conflict may be provoked.

BIRTH CONTROL

Birth control is perhaps the only effective solution to the Chinese population problems, and yet it is easier said than done. Whatever might have been the rule-of-thumb methods of controlling births in China through the centuries, birth control in the modern sense of contraceptives and conception-control did not receive any serious attention until the visit of Mrs. Margaret Sanger to China in 1922. And yet to-day in all-China, there are not more than ten birth control clinics, and these only in cities like Peiping and Shanghai. The obstacles in the path of this reform in China are formidable, as China is more backward than Japan or India in providing the necessary material and psychological environment necessary for the adoption of the contraceptive habit. The illiteracy of the peasants, ignorance of the availability of the device, absence of clinics and the necessary domestic environment, traditional conservatism

there seems to be unsettled yet fertile lands, especially around the regions of the Ordos, the Bend of the Yellow River, and certain pasture lands in Tsinghai and Sinkiang. These lands, however, are not extensive. Besides, they are not likely to attract any large number of settlers, as the conservatism of the Chinese peasants which is deeply embedded in the age-old traditions, makes them extremely reluctant to leave their homes, to sever relations with their kinsmen and friends, and to plunge into the unknown regions to start life anew".¹⁸

As for overseas emigration, the prospects of settling any considerable number of Chinese in Asian countries such as Thailand, Indo-China, Malaya, Indonesia and the Philippines, are not very bright. While it would be easier to settle Chinese immigrants in regions where there are already large Chinese communities, from the point of view of economic and social adjustment and eventual assimilation, the political barriers arising out of the resurgent nationalism of these countries would be formidable. The barriers that Thailand and Burma, for instance, have raised against further influx of Chinese are understandable on account of the difficulties already mentioned, not to speak of the absence of great economic opportunities in these countries. The only hope for the Chinese is to emigrate to countries on the other side of the Pacific Coast, that is, if those countries can be persuaded to admit Chinese immigrants. Apart from the general unwillingness of these "white" countries to receive any large number of Chinese emigrants, there will be additional political reasons to scare Western countries from even considering the question. With communism safely entrenched in power in China, every Chinese emigrant will be suspected of some subversive

18. Ta Chen, "Food and People in China" in *Food and People* (London, 1950), p. 41.

the lives of men, women and children who have been disabled and maimed in body or mind, who have been uprooted from the familiar moorings of home and tradition, and who have been seared by years of combat, hunger and privation. Psychic rehabilitation is no less important than material reconstruction to these people. In any scheme of reconstruction, China's ultimate strength must depend on the qualitative improvement of her population not only in terms of material necessities like food, clothing, shelter, education and medical aid, but also in relation to higher artistic, intellectual and spiritual values which have so significantly coloured Chinese thought from time immemorial.

INDIA

India's population problem arises primarily out of an extremely high fertility accompanied by high mortality which is only slowly declining.¹⁹ The resulting increase, which amounted to more than four million a year in an undivided India, apart from the very low survival value, need not constitute a problem if the Indian level of living were high enough to absorb the additional population without reducing the standard of living. But India's level of living is so low that any further addition to the number of poor families may well be disastrous ; and as they are so numerous it may be generalized that the total population as such will find further increase a great problem. India's density in agricultural as well as in the poorer strata of urban society, though not as great as in certain overcrowded parts of the world, is too great to permit an attitude of *laissez-faire* ; it is difficult to see how more people could be taken care of. Nor is there any migration outlet for the

19. For a more detailed study of the Indian population problem, see S. Chandrasekhar, *India's Population : Fact and Policy* (Annamalai University, 1950).

and, above all, the want of an appreciation of the worth and dignity of the individual life resulting in unplanned families — have all contributed to the resistance to this reform. However, the government, in the midst of the second World War, did appoint a committee under the Ministry of Social Affairs to recommend a population policy for China. Birth control, among others, was recommended by this committee. Though this was at first rejected by the conservative elders of the Kuomintang, it was later approved in May 1945. But the waning fortunes of the Kuomintang government gave no time to implement this tremendous reform. What the policy of the communist government towards this question will be, time alone can say. It may be hoped, however, that the communists will show a better appreciation of the pressing need for voluntary limitation of the family in China than its predecessors have done. China's friends must hope that she will not subscribe to the Marxist belief that poverty in China is not due, even in a small measure, to overpopulation but entirely to capitalist exploitation and hence the need for a radical alteration of the existing economic order and not a restriction of births.

HUMAN CONSERVATION

The greatest problems that any future government in China must face will be those of human conservation. For nearly two decades, China has had no peace. From the time of the Japanese occupation of Manchuria in 1931, China had to contend with Japanese aggression, civil war, the second World War and, finally, the civil war again. The war has resulted in the depletion of valuable raw materials, destruction of factories, houses and machinery. But the greatest loss was in human lives, though we may never know, with any certainty, the number killed, maimed, lost or otherwise disabled. The problem is one of rehabilitating

the present area. Thus the population has increased by some 43 millions in the last decade, 1941-1951.

The rate of increase of the Indian population though high has not been abnormal. For instance, between 1872 and 1941 the population of undivided India grew by 54 per cent. United Kingdom during the same period increased by 56 per cent. Japan during the same period increased by 136 per cent. So the rate of increase has not been very rapid. But the growth over the years has not been uniform, for the controlling factor has not been increasing fertility but fluctuating mortality. The population has responded to the presence or absence of wars, famines and epidemics. As these checks appeared or disappeared, the population grew and declined accordingly. Voluntary limitation of births has not played any significant role in determining the size of the Indian population. Till 1901 the population was almost stationary. The years between 1901 and 1921 witnessed an irregular and spasmodic growth of population. In the three decades between 1921 and 1951 the country registered a growth of 10·6, 15 and 13·5 per cent respectively. And if the present public health conditions continue unaccompanied by any famine, the 1961 census may show yet a large addition.

But the problem in India is not the rate of increase but the *net addition* to the existing population every decade. Because of the large number of India's existing population, even a modest rate of increase of 10 or 15 per cent yields a net gain of some 50 millions (as during 1931 to 1941), in itself larger than the population of any European country except Germany or Russia, or any Latin American country. And it is this large net addition that constitutes the problem because it nullifies all efforts to improve the admittedly very low standard of living of the Indian people. All efforts to increase the production of food, other commodities and services to give a better per capita share to the existing popula-

Indian people. Even if some countries could welcome Indians as immigrants, they cannot possibly receive four millions a year ; nor is it reasonable to expect such a large number of "stay-at-home" people to move out of India every year. The net addition of four or more millions a year, or fifty millions in a decade, or a grand total of 350/400 or even more millions in India, need not constitute a problem if an overwhelming majority of the population, not to speak of everyone, enjoyed the irreducible minimum requirements of decent human existence in terms of food, health, clothing, shelter, employment and leisure for recreation. But this is not so in India and, what is worse, is the well-known and depressing qualitative aspect of the Indian population problem. And as the quality of the people is related to the quantity, it cannot be improved without controlling the quantity. Hence, the danger in the number of India's teeming millions to her overall economic and social development and her place in the modern world.

GROWTH OF POPULATION

In the sixteenth century, according to some rough estimates, the population of the sub-continent was about one hundred millions. In the middle of the nineteenth century the figure reached about 150 millions. In 1881 when the first regular, although incomplete, census was taken, the population stood at 254 millions. In 1931, fifty years later, the census revealed 353 millions, representing an increase of 10·6 per cent over the 1921 figure. The census of 1941 showed a total of 389 millions, showing an increase of 15 per cent over the 1931 figure, or an increase of 50 millions. The 1951 census has shown a similar increase. The population of the Indian Union to-day is 362 millions (361·82 millions). This represents an increase of about 13·5 per cent over the population in 1941 which was 318·86 millions adjusted to

Puerto Rico (40 in 1942) and Mexico (42 in 1940). A discussion of the corrections to be made in the estimated and recorded rates of fertility cannot be entered into for lack of space, but the table on page 156 gives India's birth and death rates per mille since 1885. The significant fact about the Indian birth rate is not that it is one of the highest in the world but that it has shown no signs of declining during the last fifty years. It is obvious from the table that there is no definite downward trend and the little variation that is seen must be taken to be a natural and normal fluctuation for such a high figure.

As for rural-urban fertility differentials, India conforms to the experiences of other countries. In Western and industrialized countries, the decline in fertility began in urban areas, and the rural areas tended to follow the downward trend after a time lag. This has been so because industrialization has been accompanied by the widespread adoption of the planned family habit. Though India may conform to this experience eventually, it has not been the case till now. The lower fertility in Indian urban areas must be explained in terms of adverse sex ratio in the cities, where the relative paucity of females and the absence of wives constitute a remarkable feature. Indian industrial workers have a rural background and they come to the cities in search of employment only when they are faced with agrarian distress. Hence they come to the cities single, unaccompanied by their wives and children. When agricultural conditions improve, a large segment of these industrial workers return to their villages and to agriculture. Another reason for this rural-urban fertility differential may be the high infant mortality rate in the cities. Thus, the differential cannot as yet be explained in terms of either the availability or the adoption of contraceptive techniques.

An examination of the fertility rates by occupational and income groups reveals, however, a slight decline in the

tion are largely frustrated by an increasing addition to the population. Thus, in the present circumstances, improvements in the Indian standard of living and the increasing growth of population are incompatible.

TABLE 18
GROWTH OF INDIA'S POPULATION

Census Year	Population (000's)	Percentage increase
1871	203,415	—
1881	250,160	·9
1891	279,593	9·4
1901	283,870	1·0
1911	303,041	6·1
1921	305,730	·9
1931	338,171	10·6
1941	388,998	15·0
1951	362,820	13·5

(The 1951 figure is for the present area of the Indian Union).

FERTILITY

Among all demographic factors, the rate of fertility is the most important, for lack of balance, in international fertility levels constitutes the crux of the world population problem. Within a nation fertility differentials between different ethnic, cultural, economic and religious groups constitute a serious problem in the formulation of any democratic population policy.

If Indian vital statistics are accepted as somewhat reliable, despite their well-known inadequacy due to under-registration, we find that the birth rate is between 45 and 50. The figure for 1941 is 43 and this is comparable to high birth rates in Egypt (47 in 1940), Palestine (40 in 1935),

MORTALITY

India's population growth during the last century has been conditioned mainly by the high but fluctuating death rate. Famines, epidemics, the general insanitary environment and wars have contributed to the death rate, though the last factor has almost disappeared in the last half century. During "normal" years the death rate has been consistently high because of the striking lack of public sanitation and hygiene, and widespread mal- and under-nutrition of the population. The death rate rose distressingly during bad years, when epidemics and famine broke out due to the scarcity of food. It can be said with some truth that famine and epidemics alone have controlled the growth of India's population during the last hundred years.

The Indian death rate is high — 30 per thousand. The recorded death rate for 1931 was 24 per thousand and 22 for 1940, but these are under-estimates because of incomplete returns. However, this means that more than 10 million people die every year in India. While the all-round death rate is appalling enough, the death rate by various age groups is equally unusual. The most disquieting factor of the Indian death rate is the high incidence of mortality among first-year infants, women in childbirth and women of the reproductive age group. The infant mortality rate is very high — nearly one-fourth of the babies born die during their first year! According to official estimates, about half the deaths among infants occur in the first month and, of these, nearly sixty per cent in the first week. Mortality remains high throughout early childhood. About forty-nine per cent of the total mortality in any given year is among those below ten years of age, while the corresponding figure for the United States and England is only twelve per cent.

As for maternal mortality, the figures are equally shocking. Sir John Megaw, when he was Director-General

high income groups. This group generally embraces the so-called higher castes who have better educational qualifications, better jobs and, consequently, a higher standard of living. Here again the lower fertility cannot be explained in terms of birth control. Though adequate data on the question is lacking, the real question behind this is the social ban on widow re-marriage, which withdraws many women from potential motherhood. As this ban on widow re-marriage is not generally observed among the lower income groups (which roughly correspond to the so-called low castes) the fertility of this group is high. Thus the little decline in fertility that is registered for certain groups of the Indian population has not become a marked trend and the differential is not large enough to affect adversely the future growth of population. So if there is no change, the only factor that will contribute to the reduction of the future growth of the Indian population will be not the deliberate control of the birth rate but high mortality. And this is something that cannot be looked upon with equanimity.

TABLE 19

BIRTH AND DEATH RATES OF INDIA PER MILLE SINCE 1885

Year	Birth Rate		Death Rate		Natural Increase	
	Recorded	Estimated	Recorded	Estimated	Recorded	Estimated
1949	27.6	—	16.4	—	—	—
1931-41	45	—	31	—	—	—
1931-35	35	46.7	24	31.2	11	15.5
1921-31	35	46.7	26	33.8	9	12.9
1911-21	37	49.3	34	44.2	3	5.1
1901-11	38	50.7	34	44.2	4	6.5
1890-01	34	—	31	—	—	—
1885-90	50	—	26	—	—	—

MORBIDITY

If the available information on birth and death rates is somewhat incomplete and unreliable, that on the incidence of diseases is even more so. Rural India which shelters nearly eighty per cent of the total population has no adequate hospitals, clinics or other general or specialized medical services. Hence, there is no way of estimating the total morbidity of the population. Some information, however, is available for urban areas and such figures must be multiplied five or six-fold to get a complete picture for the Indian Union.

For instance, according to official sources, in normal years malaria is responsible directly for at least one million deaths every year. This really means that at least three million people die of malaria every year. If three million people die of malaria, it also means that at least ten million people suffer from it. The cost of treating the affected people — granting that they get some kind of treatment, expert or quack — and maintaining them in low health, and the indirect cost of man hours lost in the fields, factories and offices must be enormous. When the people have actually recovered from an attack of malaria their already low efficiency, due to lack of proper nutrition, is impaired further, making them less resistant to that catalogue of diseases that haunts the Indian countryside. Diseases ending in deaths are said to be selective in the sense that they wipe out the weaker element, but they cannot be said to improve the quality of those who narrowly escape death. If Indian morbidity statistics are interpreted in this manner, the resulting picture is too grim to need any comment.

Not only malaria, but cholera, kala-azar, small-pox, beri-beri, dysentery, tuberculosis, hookworm disease, filariasis, guineaworm and venereal diseases are ever-present and take their due toll. Then there are leprosy, blindness and partial sightedness, mental disorders and mental defi-

of Medical Services in India, made a random sample survey and arrived at the maternal mortality rate of 23·5 per thousand births. That is, at least 200,000 women die every year during childbirth or 100 out of every thousand girl-wives are doomed to die in childbirth! In brief, out of every hundred babies born, one-quarter die by the time they can reach their first birthday. When the fifth birthday arrives, forty per cent have disappeared through death, and when the twentieth birthday is at hand only fifty per cent are left. By the sixtieth birthday only fifteen per cent survive!

But despite the present mortality rates, the average annual addition to the population of both the Dominions was five millions. During the last two decades there has been, however, a steady fall in the general mortality rate. A further fall is bound to occur if the large-scale programmes for improving the health of the country by various planning committees are effectively put into operation. It has been calculated that even a slight improvement in the present health conditions can save three million infant lives. When this is done, India's population will increase by not five but eight millions a year. And it is possible that the 43 million increase which took place between 1941 and 1951 could take place between 1951 and 1955! To repeat, a planned and purposeful control of mortality without a corresponding control of the birth rate, can only have disastrous consequences for India.

To-day, however, the death rate is the decisive factor in Indian demography. No comment is necessary on this inordinate and tragic loss of human lives. Nor is this all. There are many who do not die but who cannot be counted among the truly living, healthy, active and gainfully employed, because of the shocking nature of Indian morbidity.

SOCIAL FACTORS

The demographic situation of any region is largely the product of its peculiar social characteristics affecting in their turn births, deaths and migration. The population problem in India can conceivably be very different if the social institutions of early marriage, universality of marriage, the social ban on widow remarriage and the joint Hindu family and other institutions and attitudes resulting in an adverse sex ratio, among others, did not exist. But as these institutions with socio-religious tradition and sanction behind them exist, and condition the lives of an overwhelming majority of the people, the demographic problem has become what it is to-day.

Early marriage and universality of marriage are dominant features of the Indian social scene. Indian girls attain puberty between the ages of twelve and fifteen and though often physically immature they are physiologically ready to bear children. And cases are not wanting where reproduction has begun at the age of fourteen or fifteen. The Report of the Age of Consent Committee and the Report of the All-India Women's Conference have estimated that nearly 50 per cent of the girls married in India are below the age of fifteen. While child marriage as such has largely disappeared, a majority of girls between 15 and 20 are in the married state. The girls in rural areas marry as soon as they reach puberty, begin bearing children early, and reduce the period of lactation, thereby shortening the intervals between childbirths with the disastrous final result of premature deaths.

The second factor is the universality of the married state. Everyone in India, sooner or later, gets married. It is a quasi-religious duty. As an individual's economic security is not a prerequisite to marriage and as there is no individual choice, by and large, in obtaining a partner, there is no economic deterrent to marriage. For a representative

ciency, and a score of other infirmities. All these are curable or, what is more important, preventible, more or less, but in India the lack of comprehensive and organized medical services manned by an adequate number of competent and qualified personnel, makes them very formidable. Curative medicine will only half solve the problem. As long as the people's vitality and resistance to disease is low, due to poverty, malnutrition and ignorance, and as long as the shocking insanitary and unhygienic environment of the towns and villages persist, any medical approach to this problem can only be fragmentary.

Despite the inadequacy of the returns on the specific causes of mortality, a rough idea can be obtained from the following table for a representative pre-war year, 1939. The general death rate of 22·2 for 1939 was distributed as shown in the table. It is highly probable that where deaths have been unattended to by doctors, as considerable numbers are, the returns usually list "fever" as the cause of death. This lack of precise information nullifies the efforts of the public health department because the authorities, who are anxious to control the death rate, do not know what exact causes contribute to the high death rate.

TABLE 20

DEATH RATES FOR SELECTED DISEASES IN INDIA

	Cholera	Small-pox	Fever	Dysentery and Diarrhoea	Respiratory Diseases	Injuries	All other Causes
Deaths per 1000 of Population	0·4	0·2	0·1	13·0	0·9	1·8	5·8
Percentage of Total	1·8	0·9	0·5	58·1	4·1	8·1	26·4

symptoms of such decadence. If there is any truth in this explanation, the virile people of the North-west must be the most decadent people. As we cannot have it both ways there seems to be little truth in this explanation.

Some others like the Census Commissioner for Bombay (1921) and the Census Commissioner for India (1931) have offered a biological explanation. According to the former, "the Indian caste system with its exogamous *gotra* (sept) and endogamous caste is a perfect method of preserving what is called in genetics "pure line". The endogamy prevents external hybridization while the exogamy prevents the possibility of a fresh pure line arising within the old one by the isolation of any character not common to the whole line". The latter, accepting this view, comments "whether this (above) proposition be entirely acceptable or not, it may be conceded that if once a caste, whether as a result of inbreeding or some totally different factor, has acquired the natural condition of having an excess of females, this condition is likely to be perpetuated as long as inbreeding is maintained". This explanation is at best plausible but we have very little knowledge about the presence of a genetic factor, if any, in the Hindu caste system. While there may be some truth in this explanation in the sense that excessive inbreeding is generally harmful, it does not explain the sex ratio *at birth*.

The available statistics tell a different story. Actually, between the ages of 1-5, India has an excess of girls and only at the next age group the sex ratio is reversed in favour of males. A more rational explanation for the paucity of females is that though the female infant is definitely better equipped by nature for survival than the male, the advantages she has at birth in India are probably neutralized in infancy by comparative neglect and in adolescence by the strain of bearing children too early and too often. As Hindu parents put greater premium on male children, they are apt

census year like 1931, we find that 467 males and 492 females out of every thousand were married. That is, taking into consideration all widows, some widowers, ascetics and mendicants, almost everyone of marriageable age was actually married. When factors favourable to the postponement of marriage, like prolonged education, lucrative employment, eagerness for personal and social advancement, free choice in securing life's partners, and other considerations that operate normally in Western society will come to operate in India, it is difficult to say. But the sooner such considerations come to prevail, the easier will be the approach to solve some of India's social problems.

A third striking characteristic of the Indian social situation is the scarcity of females. There has been a deficiency of women in the Indian population within the knowledge of her regular census history. In 1941 there were only 934 females per every 1000 males. In 1931 and 1921 the ratio was 940 : 1000. The sex ratio in England and Wales in 1940, for instance, was 1000 : 940 revealing a contrasting deficiency of males. The steady fall in the proportion of females to males has been going on in India since 1901 and the 1951 census may not reveal any significant change.

Several explanations have been offered for this phenomenon of deficiency of females. Some explain it as the result of relative under-enumeration of women. This is possible but during the last fifty years the efficiency of the Indian census organization has consistently improved but the adverse sex ratio has increased rather than decreased. Some argue that excessive masculinity is an index of "racial" decadence, but the sex ratio is more unfavourable in the North and North-West region — parts of present Pakistan — where the so-called "martial races" live. We have little knowledge of what constitutes "racial decadence" and still less scientific evidence of the causes and

widow-hood. Since widows cannot remarry, widow-hood increases the already existing shortage of eligible brides, which means of course the paucity of women. Thus the vicious wheel whirls on!

Thus, the two significant facts about the wasteful balance between births and deaths in India are the large decennial increases in the population and the tremendous human cost at which this increase is being maintained.

THE FAMILY

In the Hindu family, the unit is not husband, wife and children, but the larger family group. It is at once a corporate economic, religious and social unit. In a joint family when sons grow up to manhood and marry, they do not leave the parental household, go out and live in separate houses, but occupy different rooms in the parental residence along with their children and children's children. Correspondingly, the womenfolk also, the mother, the daughters-in-law, unmarried daughters, grand-daughters and sometimes great-grand-daughters live under the same roof. The daughters of the family, on getting married, of course, leave their parental home and become members of the joint family to which their husbands belong. And so, naturally, the number of those who live together under the same roof may be very large and may even run to a hundred. The household servants, many of whom often grow up with the family, have their recognized place, and their attachment to the master members of the family is often deep and cordial. To accommodate all these, it need hardly be added that the house has to be very large, indeed.

The father and mother have their places of honour in these joint families; the father being the oldest and most experienced, is nominally the head of the family. Under ordinary circumstances it is he who controls, guides and directs the whole family, unless he is very old or an invalid,

to treat female children with relative neglect, especially when they are assailed by infantile ailments. This, coupled with early marriage and a high birth rate, results in greater and early deaths among women. We have some comparable evidence in China that supports this view. Dr. Ta Chen, discussing the sex ratio in the Kuming Lake region, observes: "It seems clear that in China relatively more female infants are born, but as they grow up, the male babies gradually catch up with them in numbers, evidently indicating a proportionately higher mortality among female children. This may be due to the fact that in the Far East generally and in China particularly parents usually put higher value on male children for the perpetuation of the family line and for the observance of filial piety. Thus female children are unconsciously neglected, thereby leading to the higher death rate among them."²⁰

The social ban on widow remarriage is yet another reactionary feature of Indian demography. The Indian demographic situation is closely interwoven with social problems, for one undesirable social institution leads to another, and so on, in an endless chain. This practice of "socially sterilizing" the widows results in considerable disparity in age between husbands and wives. Since most widowers remarry and since they cannot marry widows, they have to seek wives among girls much their juniors. This unequal combination from the point of view of age itself leads to an increasing number of widows, for the old husband passes away, leaving behind his young wife, a widow. And, of course, she cannot remarry. The disproportionate sex ratio and the resulting deficiency of women keep up the custom of early marriage for girls. As bachelors and widowers have to take brides of any age they can get, the disparity between partners is increased. This difference in age increases

a right to it, and the necessary and legitimate needs of all the family members are generally met. Thus, all earning members — mostly male — contribute in proportion to their income, and all members — men, women, married, widowed, and children — whether earning or not, enjoy the common family resources. In practice, it sometimes happens that an unemployed brother, his wife and children, may consume more from the family funds than a childless brother whose income may be considerable. This arrangement of give-and-take demands a great deal of mutual tolerance, love, understanding, and accommodation on the part of the members. This system, in which all are bound to contribute according to their earnings and where all are entitled to be maintained from the family funds according to their needs, is in practice a recognized socialist unit, though not necessarily secular in spirit. All the adult members follow the principle, "Give what you can and take what you need". In practice, the system has through centuries, led to beneficial as well as harmful reactions on the Indian social and economic structure.

In brief, "its essence is the common ownership of means of production and the common enjoyment of the fruits of labour. Both inherited and personally acquired belongings are regarded as common property; and the supreme authority is the family council, of which the head of the family, generally the eldest male, is the executive officer but not the dictator. The family may consist of dozens of persons, grandparents, uncles, sons, grandsons, with their wives and children; and the ties of loyalty to which it gives rise are intense. Indeed, to many Hindus the duty owed to other members of the joint family appears something far stronger than any duty owed to the State. What Westerners call nepotism is in India a positive virtue."²¹

21. Rushbrook Williams, *What About India* (London, 1938) pp 23-24.

when the eldest son or the eldest member in the nearest line of male descent takes his place. The mother has always her say. Though grown-up sons live in the family with their wives, the respect and consideration shown by all members of the family to the old mother is surprisingly great. And it may safely be asserted that no important measure of domestic concern will be approved of, or put into operation without the final but the formal sanction of the mother.

In the family, food and property or estate are held in common and owned jointly, and the actual share to which each member is entitled if there be separation, diminishes or increases with each birth or death. This arrangement is not disturbed even if some members of the family have to reside far away from the home in different parts of the country by virtue of their calling. When at home, all share the food prepared in a single common kitchen. In fact, in popular parlance, the chief criterion of the joint nature of the commensal family arises largely from the fact of the common kitchen. The saying is: "*Ek hi chule ka pakka khate hain*" or "They eat food cooked in one and the same kitchen."

The ancestral property and the income arising from it, along with the earnings of the individual members, constitute a common family fund, out of which the expenses of the whole family are met. Often an earning member of the joint family who happens to live outside the common family in a distant place, remits a part of his income to the common family pool, a system resembling that of the pre-Revolution peasant family in Russia. The funds — money, land, houses, jewellery and cattle — like other administrative affairs, are looked after by the father, or the eldest son, or some senior male relative. But in financial matters, all adult members are usually consulted before any major item of expenditure is granted. Every earning member contributes his share to the family fund. Every member also has

Whether the common ancestor worship in any way led to the joint family system or *vice versa* need not detain us here. But possibly the economic factors that gave birth to the joint family might have engendered and fostered in its train the common ancestor worship. This common religious tie, coupled with the economic bonds of mutual helpfulness, placed the joint family on a very secure foundation. And in the favourable atmosphere of the prosperous years of a few subsequent centuries the joint family exhibited no weakness that would recommend its rejection from the Hindu social economy. Tested thus in the crucible of years of experience, the system was found useful under the then agricultural-cum-rural conditions and therefore was adopted as a permanent feature of Hindu social life. And it is for this reason that the joint family system wove itself securely into the rural pattern of India's social life.

In the later centuries, the particular economic factors of abundance of natural resources, unoccupied land, and scarcity of population that brought the joint family system into existence, disappeared. Exactly contrary conditions came into existence, for population began to grow fast (the rapid growth of the population in itself was partly the result of the joint family system, in which no one hesitated to take a wife, for individual economic independence was not a prerequisite for marriage, since there was always the family to take care of the new additions to the household), all fertile and free land was occupied and, in the absence of adequate subsidiary occupations, the pressure of the growing population on the soil, almost the only source of sustenance, was beginning to be felt. True, there were the cottage industries and rural handicrafts, but waves of foreign invasions of India dislocated the basic Indian rural economy, and the cottage industries and handicrafts, with nothing to take their place. No large-scale industries were started to absorb the surplus population that the land could not support. The

Its origin and growth: While the origin of this historical unit of the Hindu family system is lost in the mists of antiquity, its growth at least can be accounted for by the economic and social conditions of earlier centuries of Indian history. In a way its origin, too, perhaps can be explained, though it can be nothing more than a rough hypothesis. At one time, India was (like the United States to-day) a land of vast and rich alluvial plains with a sparse population. Labour was scant but resources were plenty. Vast stretches of unoccupied and uncolonized land could be had for the mere taking; these conditions possibly led to the large family as the best suited unit to own and till the land. This early experiment of jointly owning the land, ploughing it, and sharing its abundant produce, proved so successful — especially in view of the absence of competition and population pressure — that the system persuaded itself into permanent adoption by the early inhabitants. It is no wonder that, with plenty of rich and fertile land, with good and abundant yield, and with the absence of an oppressive government, the people clustered together and pursued their almost sole occupation of agriculture in peace and contentment. There was no pressure on the soil, people were few, and no scarcity of food was in sight, and it led to no fragmentation or subdivision of the holdings. Centuries passed, but the same household continued to be owned and occupied, and the same soil tilled, and the fruits shared by generation after generation, cherishing the memory of a bygone ancestor. This gratitude itself to an original ancestor — as far as they could trace — who bequeathed to his progeny not a barren soil and a burdensome debt, but well-watered and carefully cultivated land with plenty of livestock, deepened to veneration. In the course of time this veneration ingrained itself into the Hindu social mind as ancestor worship, which is to-day an integral part of Hinduism, at least in theory, as it is of Confucianism.

the forefront, especially when girls from different families of varied cultural and social outlook are brought by the brothers, who marry them, to live under the common roof. But these very human frailties, perhaps, bring into play the nobler side of human nature. The brothers, and much more their wives, may quarrel, and often do quarrel, but after all we recognize brothers by their quarrels !

One remarkable result of this kind of communal living is, that few men have ever been left in a desperate state of misery and poverty. Instead of some families being very wealthy and others very poor, the joint family has tended to make most families poor and very few wealthy. The family ties stretch so far and wide that even the most distant and under-privileged member will find shelter under the roof of the joint family. This fact, that somewhere in the large family the meagre dole of daily rice and curry can be obtained, has not reduced many to actual or absolute starvation, whatever might be their inability in terms of their current earning capacity. The result is, that there has been no poor law, poor house, or work house run by the State where the penniless and the destitute can go as a last resort. Besides, in the agricultural and artisan joint families the large numbers provide a kind of old-age insurance to the aged parents and other old members of the family who have invested their savings in educating and bringing up their children. The Hindu family system in practice has been the traditional Indian method of insurance against unemployment. When there was no old age pension in Hindu society the only insurance against loneliness and starvation in old age was to have children, earning sons if you please, who would respect the old parents and take care of their needs. This does not mean, however, that to-day there is no need for an asylum for the workless and the destitute, for, with the impact of modern Western civilization, the once strong ties of the joint family have gradually

primitive wooden plough of the joint agricultural family and the unscientific and undeveloped nature of Indian agriculture made the rich soil appear almost exhausted. These conditions, that were exactly contrary to those that gave birth to the joint family, strangely enough neither weakened nor demolished the structure of the large family. On the contrary, they made the joint family the central basis of the Indian rural economy. When the population reached the limit under the then existing undeveloped nature of the land and other natural resources, the sons on getting married could not go away from the family and "set up a separate house" and start a new and independent life even if they wanted to, but had to live on the old homestead of their father and scrape what little they could from the joint family income. And in the frequent intervals when the country was thrown into political upheavals as a result of foreign invasions, with the consequent economic exploitation and political insecurity, the joint family proved to be the ideal family unit to weather these storms and stresses and present a united front in the face of these great odds and difficulties. In their wake came periods of famine and drought which were only too frequent in the chequered history of Indian economic development. During these periods the joint family provided the much-needed succour to the individual members and helped them to survive the distressing conditions. This system thus served a very useful purpose in preserving the family integrity and the communal morale, when different factors sought to undermine and destroy them.

Its advantages: In a joint family every member gets his first lesson in forbearance, tolerance, and accommodation. It takes all sorts of persons, though knit by ties of consanguinity, to make a joint family. And, naturally, misunderstandings, wrong and unjust interpretations of others' doings in the family, minor jealousies, and even silent bickerings often come to

ing gifts — schools and libraries, temples and tanks — to the community that made it possible for them to earn that money. Philanthropy in ancient India was private and anonymous, and had nothing of the spectacular publicity with which the modern millionaire benefactors make their munificent gifts to humanity which, of course, does not rob it of its value. But it would be an error to assume that philanthropy as such is absent in India to-day. It is not so vastly impressive and immensely useful as in America, but modest beginnings have been made.

The beneficent aspects of the joint family have been ably summed up by an Indian writer whose great love for this Hindu institution has led him to say: "The association in one household of married couples, parents and grand-parents tends to soften the angularities of temperament and habit. Of collisions of temper and habit, jealousies and suspicions, there ought to be no occasion in the household. The older members will moderate the impetuosity of the younger, and the patience and experience of wider perspectives of the elder would limit the youthful enthusiasm and indiscretions of the younger and prevent much of their cruder manifestations. There is restraint right through the household, the restraint from word or deed that might cause offense or pain. There is respect for the elders, tenderness for the sick or maimed. Within these is one wonderful spirit of equality which demands equal share in income as well as in feasts and festivities irrespective of age and infirmity. What is good for one is good for all. No special favour is allowed to be shown by any mother to her children which may not be shared by other children in the household.

"The Joint Family affords the best training in the humanities. Love and affection carried beyond the narrow circle of the family to embrace relatives of the second and third degree and the close adjustment necessary in a family

but definitely been loosened. The maxim of "everyone for himself and God for all" is gaining ground even in Indian society.

Until recent decades the joint family system has meant an almost total absence of social services in India. It has probably taught its members much more to care for others than, say, an American or an Englishman will ever do. The support and sympathy that one in India extends to others may stop within the limits of the joint family or the community, but it does mean that there is always some relative on whom one can call in trying times. It is true, of course, that social service schemes in the West are planned and put into operation in a systematized and even spectacular way, for it belongs to the province of the State and is not left to the discretion or the charitable disposition of an individual family. According to some, an American or an Englishman, or generally any Westerner, may turn his unemployed brother out of doors to go on work relief or poor relief, and then bequeath a fortune to a humanitarian and charitable cause. A Hindu, on the contrary, will support all his unfortunate and less privileged relatives as almost a religious duty, but may not give a cent to organized charity. This is true in a restricted sense not only of India but also of China and Japan. It must not be forgotten, however, that in ancient Hindu and Muslim India, poets and painters, writers and artists, thrived because of patronage from both the rulers and the community at large. The great Indian temples, for instance, the marvellous specimens of ancient Indian architecture that stand to-day as mute symbols of a glorious past, were all built by Indians of charitable disposition. They owe their existence not only to the munificence of the rulers—Hindu, Muslim and Buddhist—but also to the benefactions of the common people. It is truly said of certain communities in India that they spend half of their lives feverishly earning money and the other half in bestow-

comparable institutions in Europe. The French provincial family and the Hindu joint family have much in common in their social aspects. In France, observes a recent writer; "Family is the kernel of the body politic. The Latin Frenchman lives primarily in and for his family. The last does not consist merely of his wife and children; it is the regular thing in the provinces, and very common even in Paris, for grand-parents, parents and children all to live together forming a whole tribe, which is generally ruled over by the senior grandfather".²⁴

There is a closer analogy nearer home, both in Russia and China. The Hindu family resembles the pre-Revolutionary Russian peasant family. "The members of the Russian family held land and livestock in common; ploughing, sowing, reaping and gathering of harvests — all were carried out by common labour. Every member worked for the common good and the result of the labour was common property and every member's legitimate need was met. Just as in the Hindu homes even when a son went away from home he was still expected to contribute to the expenses of the old family".²⁵

Beyond these Russian and French analogies, there is the Chinese family system, which, as we have seen, is very similar, if not identical with the Hindu family in most of the details.

While these Western and Eastern parallels themselves have sustained serious shocks and exist no longer in their pristine forms in every detail, the joint family in India has undergone no revolutionary change. Viewed to-day in its modern context, its grave drawbacks become strikingly apparent. And the cumulative effects of these drawbacks have affected adversely the Indian population problem!

24. Cohen Portheim, *The Spirit of France* (London, 1933), p. 17.

25. Olga Lang, *Chinese Family and Society* (London, 1946), p. 146

of any members living together, all based on an intimate knowledge of their qualities and feelings, help to develop the understanding and cultivate the emotions".²²

Its Drawbacks. While the joint family in its historic role served a distinct need and preserved certain desirable features of the Hindu family in the face of heavy odds, it tended to render the population immobile. It failed even in olden times to encourage a daring and defiant spirit.

Though the Hindus emigrated to and established colonies in far-flung parts of the world, they never became pioneer adventurers in braving the unknown. C. F. Andrews observes: "What has seemed always strange to me in my ignorance of what an upbringing means in such a joint family is that there have not been more pioneers in the past who have gone far and wide seeking adventure, while those dependent on them remained behind, well looked after under the paternal care of the head of the family, for anxiety concerning wife and children must immensely be lessened when they are left in such safe keeping. It may be the case that the adventurous side of human character is softened by the continual give and take which the joint family system requires. The individual initiative becomes weakened at the very time that the gentler side of life is strengthened".²³

The part played by the joint family in the evolution of Indian culture has thus been a mixed blessing. This kind of communal living, rather this domestic commune, has no close parallel in the United States or in the United Kingdom, though if the attempts at comparison are stretched a little the old clan relationships in the north of Scotland may fairly remind one of the Hindu joint family. Though this institution is peculiar to India and the Orient there are roughly

22. K. Kunhukannan, *A Civilization at Bay* (Madras, 1931), p. 219

23. C. F. Andrews, *True India* (London, 1939), p. 251.

making of a nation, loyalty to the family and the clan are given up in favour of larger and larger social groups till the supreme allegiance to the larger social entity is claimed by the democratic state. But in India the greatest loyalty is still to the smallest of groups — the joint family. That is why the Hindus are not social-minded in the Western sense. They are just family-minded, which, in other words, means magnified nepotism.

It is to this joint family system that must be traced also the implicit obedience and the unquestioning loyalty ingrained in the Hindu social mind toward all authority — whether it be in the State, religion, or social custom. To the ordinary Hindu there is no defence of doubt even if only to lay the foundation of belief. To him, all authority, secular and spiritual, is sacred regardless of its value or validity. What is established must be obeyed and what is old is necessarily good. The liberation of the critical faculty, which throws every institution, every ideal, and every-ism into the crucible of reason, so necessary to a progressive people, is impossible in a society in which its primary unit, the joint family, itself is an embodiment of the principle of authority.

Not only has the joint family, while nurturing its own nepotism, impeded social growth, but it has led to the most amazing inbreeding — which is perhaps the worst of its faults — among the family members and the kinsfolk so that the community has been divided and subdivided into innumerable petty groups and Hindu society has almost become a sociological fiction.

The greatest drawback of the joint family lies in its conservative and reactionary attitude toward women, their position in the family, and the prospects of their progress. Barring the position of the old mother (or the old widowed sister or the wife of the eldest brother), who may be called the head of the women's section, the lot of the girls who

The joint family is definitely a force against the freedom of the individual. Individualism has several drawbacks, but its ability to secure experimentation, innovation, and ultimate change in a society that offers resistance to reform is of great advantage. The individual in the joint family is not an independent unit ; he is at best a co-ordinating part. So the group family stands in the way of the free and full development of the individual family ; often, even gifted and exceptionally endowed individuals are pulled down to share and lead the mediocre life of less gifted members of the family. Otherwise the stability of the joint family will be shattered just as the strength of a chain depends on its weakest link. It also leads to crowd life especially in our towns and cities where very large houses are beyond the command of all and where privacy is a rare privilege. The home is characterized by the huddling together of children, boys and girls, men and women. The individual attention to children in their upbringing is absent, with the result that the physical condition of children and their mental outlook in general are far from satisfactory. How far the high rate of Indian infant mortality can be accounted for by the crowded joint families has not been definitely ascertained, but there is a direct correlation between this crowded life of the joint family and the high infant mortality rate.

Above all, the joint family breeds a kind of authoritarianism. To some, the lead of the elders in the family is a dictatorship of love, but it is doubtful whether it has ever been so or is so to-day. It exalts the elders irrespective of ability or merit and enthrones authority in every detail of the individual's life. In its patriarchal pattern, even civic loyalty is sacrificed in favour of filial authority.

It generates, in fact, a multitude of loyalties and a plurality of allegiances. It stands as a barrier between the individual and the State, as a group within a group. In the

shaken the joint family rudely but unfortunately has not destroyed it completely. In recent years, however, fissiparous tendencies have set in, and the disintegration of the joint family has begun. The leaven of change and reform that is stirring modern India has affected this system along with others. Gone are the days when grown-up sons lived in the family household and helped in the father's farm or hammered in the family smithy or found jobs in the vicinity of the homestead. To-day many thousands—yes, millions—are compelled to go far afield in search of work and when they succeed they naturally set up homes of their own. And they find it difficult and distasteful to make contributions from their meagre financial resources, as before, to the distant joint family. The modern wife not only protests against such contributions, but also resents the edicts that emanate from the husband's family. All these trends, if developed on sound lines should be welcome, but revolutions in family traditions and ideals are not wrought overnight. The unwholesome influence of the joint family still persists in many parts of India with a tenacity that is distressing. And the relation between this attitude towards the family and the population problem is obvious.

IMPROVEMENT OF AGRICULTURE

What is the way out? The problem of population has to be considered in relation to the means of sustenance, mainly food supply. Nearly 70 per cent of the population is dependent on agriculture for a livelihood. As the mouths to be fed every year increase, the area of productive land diminishes. That there is pressure on the land in India to-day cannot be denied. Indian agriculture is characterized by primitive methods of farming, dependence on the vagaries of the monsoon, subdivision and fragmentation of land, consequent on the Hindu and Moslem laws of inheritance

come into the family by marriage is not always happy. While the position of the mother-in-law in the West gives rise only to an annoying joke, the mother-in-law in the Indian home is the proverbial tyrant. The reason for this tyranny is very simple. The arrival of the daughter-in-law in the family usually signifies the adoption of someone — not exactly a servant or a maid — who will be the uncomplaining drudge of the family while claiming ties of intimate relationship. How easily does the domineering mother-in-law forget that she too once was a meek daughter-in-law! Perhaps, the mother-in-law's very recollection and recognition of her sad days as a daughter-in-law urges her to wreak a vicarious vengeance on the young and innocent daughter-in-law. The joint family is so constituted that the sympathy and understanding, affection and love of the husband are denied to the bride. The effect of this emotional lack on the sensibility of a young woman torn from the familiar moorings of her own home, in a new family and amidst strange surroundings is, to say the least, deadening. Nothing will reform the deplorable lot of Indian womanhood unless and until the family units are so reconstructed that every wife becomes a mistress of her own little home. To-day, such a small, self-contained, little independent home is a vital necessity and should be the first step towards a healthy and progressive India.

The Future of the Joint Family: Thus, the Hindu joint family in India has played a distinct and useful role in the evolution of Indian economic development. But to-day, the quasi-prosperous conditions of the 'pre-Muslim era' that brought it into existence, and the distressed conditions of the post-Muslim and pre-British era that fostered its growth and preserved it, have definitely passed away. In a word, the joint family has outlived its utility and is an anachronism in modern India. The super-imposition of a Western pattern of life and a European civilization on Indian society has

this land the Royal Agricultural Commission, India (1926) said: "It is difficult to believe that the whole of the vast area now classed as not available for cultivation, amounting as it does to 150 million acres or 22·5 per cent of the total area of British India (provinces) is either not available for cultivation or not suitable for cultivation".

India has, therefore apparently not exhausted the supply of her cultivable land though such land is admittedly of an inferior quality. And what is cultivated appears to be eroded and exhausted because of the primitive technique of farming. With modern methods of agricultural science, of erosion prevention and soil reclamation, the cultivated land can be made to double its present yield; and much of the so-called uncultivable waste can be brought under profitable cultivation. Such an improvement is welcome but it will touch only the fringe of the problem.

While increased yield and more acreage of cultivation are possible with the aid of science, they cannot by themselves afford a better standard of living to the Indian population, or completely solve the population problem, unless and until a substantial number of people now dependent on land are transferred to some other productive employment as in industries.

INDUSTRIALIZATION

Industrialization is often offered as a stock remedy for Indian population problems. A detailed discussion of the possibilities of rapid and large-scale industrialization of India is beyond the scope of this survey, but it must be pointed out that the basic pre-requisites for industrialization, namely, raw materials, capital resources, skilled labour, a market and technological "know-how" are available in India to a greater or lesser degree. The industrialization that has taken place in India during the last thirty years, however, has not helped to ease population pressure because it has been piecemeal and unplanned, and the percentage of popu-

(which enjoin the succession to immovable property by all male heirs, usually in equal proportion) leading to uneconomic holdings and to excessive dependence by the majority of the people on land for livelihood. Moreover, a quasi-medieval land tax system has created a large number of parasitic middlemen who have come to possess undue rights on land, claiming a considerable share of the income arising from it without deserving it. The primitive technique of Indian farming is responsible not only for the low yield per capita, even when compared to countries like Japan and China, but also for the gradual deterioration of land, soil erosion and deforestation.

This does not mean, however, that there is no scope for improving Indian farms and their yields. According to 1939 official statistics one-third of the cultivable land in both the Dominions lies idle—not fallow. According to the latest available statistics for the Indian Republic for 1950, the cultivable waste is about 11 per cent of the total available land.

TABLE 21

AGRICULTURAL AREA OF THE INDIAN REPUBLIC (1950)

	Millions of Acres	Percentage
Net area by professional survey ..	781	100
Area under forest ..	109	14
Area not available for cultivation ..	255	33
Cultivable waste other than fallow ..	88	11
Fallow land ..	54	7
Net area sown with crops ..	275	35

Thus, of a cultivable area of 417 million acres, only 66 per cent is sown with crops, 13 per cent is fallow, and no less than 21 per cent of land is cultivable but left waste. Then there is land "not available for cultivation". About

as in Assam in India and in Baluchistan in Pakistan. During the last fifteen years, half a million immigrants went to Assam from other provinces, particularly Bengal. The provision of some admittedly inferior land for half a million people during a decade and a half, when the country's population increased by more than fifty million people, is only a drop of relief in an ocean of increase.

Certain patterns of inter-provincial migration established in India during the last thirty years show that inter-provincial migration has been constantly going on. The Assam Plantations, for instance, get their labour supply chiefly from distant Chota Nagpur. The nearby Bengal peasants are not attracted by these plantations, nor are they absorbed by the Bengal jute mills, but they move in to occupy the land in the Assam valleys. The coal mines in Chota Nagpur do not attract the people nearby and so labourers have to be recruited from the Uttara Pradesh and Bihar. We have no reliable figures, but these population movements are more of a seasonal migration and do not have any permanent effects. And then, when one group of people have moved out of a certain province, another group of people seem to be moving in. So the net result of such inter- and intra-provincial movements does not seem to constitute any relief to the pressure on the land.

If migratory movements between different regions are to be explained as a response to the "pull" of prosperity from less crowded areas, rather than the "push" of poverty from overcrowded areas, there are no regions in India where the standard of living of the masses is markedly higher than in the rest of India. The variations in the different levels of living in different provinces and agricultural regions are not significant enough to encourage inter-provincial or inter-regional migration. After all, migration, unlike water, is from a blighted region of low level of living to a prosperous one of high level of living. There are no conditions so ab-

lation gainfully employed in modern industry has been less than one per cent of the total population. This haphazard industrialization has also led to the decay of cottage industries, causing further unemployment. Only planned large-scale and rapid industrialization and the development of cottage industries—there need be no conflict between these two—can keep pace with the growing population and siphon off the surplus population from the overcrowded land to factories.

India's industrialization is important in the solution of her population problems for two reasons. It will increase the productivity of labour and create an abundance of badly needed commodities and services and transform the present economy of scarcity into an economy of abundance. Secondly, and this is probably more important for India, industrialization will encourage the development of new urban patterns of living which lead to the control of the high birth rate. The "why" of this process need not be discussed here, but this has been the experience in the United Kingdom, the United States and the West generally, and Japan. There is no reason why India should not conform to this experience of other countries where industrialization has been accompanied by declining fertility.

INTERNAL MIGRATION

What about migration as a solution to the Indian population problem? As for the possibility of internal migration as a method of relieving the population pressure, there is not much scope either, because there are no empty spaces within the geographical confines of India. There are no empty spaces within our national boundaries unless we reclaim the Rajputana and other deserts though the fact remains that the deserts are gradually encroaching upon us. There are, of course, certain provinces and regions where the crude density per square mile is relatively low,

agriculture is not just an occupation ; it is a way of life to an overwhelming majority of the population. Then, there is an incredibly large rural indebtedness that chains the peasants to their mortgaged homesteads. Even if the average agriculturist is ready to forsake his traditional calling, there is no guarantee that he can make a living otherwise. Availability of, as well as adaptation to, a new vocation is neither easy nor smooth.

However, during lean years a migration from villages to towns does take place. It is not a voluntary and willing movement. Only economic pressure of the worst kind forces the agriculturist into the city in search of a job — any job — to earn a livelihood. He hopes that it is only temporary and longs to return to the village. Hence he leaves behind his wife and children and goes to the cities. The rural hovel is exchanged for a tenement in a city slum. The temporary nature of this rural exodus has been responsible for the unfavourable sex ratio in industrial cities. The congregation of men without wives and children in the industrial cities encourages prostitution and other social vices.

Certain social factors also contribute to this essential home-loving character of the Indian people. Caste and the diversities of region and communal mores render severance from home, village or town uncomfortable. Migration to another province or even to a city in the same province may mean an unfamiliar life among "strange" people — albeit Indians — who may speak a different language, eat a different kind of food and may have different habits and customs.

Finally, migratory tendencies are exhibited largely in small units of population. The smaller the unit of population, the greater the proportion of persons born elsewhere. The fact that India shelters more than three hundred and sixty million people militates against any free mobility of

solutely unfavourable as to push people outside their regions if they have nowhere else to go. Thus, whatever internal migration has taken place in the last thirty years in India has been in response to rigorous famines or the construction of new irrigation projects and canals rendering the cultivation of more land possible. As severe famines or prosperity-promoting irrigation projects are not annual occurrences, the impetus to migrate has not always been present.

Several factors—social, economic and religious—distinctive of Indian economy can be cited to explain the traditional immobility of the Indian population and the very slender volume of internal migration. The comparative stay-at-homeness of the Indian population is a regular feature of many an Indian Census Report. In all the censuses (except the last which witnessed the Indo-Pakistan population transfers on an unprecedented scale), nearly 90 per cent of the people have been enumerated in the districts in which they were born. Another 5 per cent have been enumerated in adjoining districts which were more industrialized or urbanized than the districts of their birth. In 1901, only 9·27 per cent of the total population was enumerated outside the district of birth. In 1911 this percentage fell to 8·7 and in 1931 this ratio was repeated. Though figures for 1931-41 are not available there is no reason to expect any radical change, for during that decade there was no significant inter-provincial migration, as was witnessed in the last decade consequent on partition.

The economic reason for this immobility is simple. As the majority of people are wedded to an agricultural life, and since land is the chief source of sustenance, the average Indian peasant cannot possibly leave the farm on which he was born and wherein he works. It is not that agriculture in India is such a paying proposition that it renders emigration to urban areas unattractive, but that there is an absence of a better calling elsewhere to take its place. In India,

As long as emigration of labour from India continued, fresh blood was added to these tiny Indian communities and distinction was often made between "Colonial or foreign born" and "home born". With the suspension of the indenture system in 1917 and its complete abolition in 1920, the foreign born element began to preponderate. The tide of Indian emigration in the period of 1908-25 became a trickle from 1929 and to-day there is virtually no Indian emigration at all. Thus an overwhelming majority of Indians abroad were born in foreign countries. Their interests, therefore, are tied up with other elements of the local population, rather than with the people in India, though cultural, religious and sentimental ties between the mother country and the scattered daughter communities persist.

When the indenture system was mooted, it was planned as a *temporary* migration of labour. In consequence, the immigrants were all men. When the men began to reindenture after the expiration of the first terms, and when some began to settle in foreign countries permanently, the want of a home and family life became apparent. Since only a handful married foreign women, Indian women emigrants were recruited to satisfy a particular prescribed ratio. But these women were totally unrelated to the men already overseas; and whatever the settlement of families that took place subsequently, it had no relation to the generally accepted concept of the "colonization of families". Introduction of women did not necessarily ensure happy home life for some of the men abroad were already married and had left their wives and children behind in India. This disparity in the sex ratio led to sexual crimes and suicides, the latter feature almost unknown in India. After considerable agitation and negotiation, wives and minor children were finally permitted to join the men. To-day the sex ratio among the Indian children born abroad tends to be normal,

the population although this may seem paradoxical. For-saking traditional homes and farms in favour of distant places is fraught with psychological difficulties, even though the new homes may promise relative affluence. And above all the prospective emigrant must be educated and be aware of a better life elsewhere, beyond his village, city or province.

In these circumstances, internal migration offers no substantial relief from population pressure. And the partition of the country which has already forced upon both the Dominions communal migrations renders the prospects of further inter-provincial migration dim.

INDIAN EMIGRATION

The emigration and status of Indians in foreign countries in general and in the regions within the British Empire in particular have attained a significance in India far greater than their numbers may warrant. The movement began about 1834 when slavery was abolished in the British Empire. With the permission of the Government of India, unskilled Indian labourers were recruited from the Indian countryside among the underemployed Indian peasantry by organizations set up by foreign employers. Nominally, the indenture was for five years, after which the workers were to be repatriated to India. But often, when the indenture was over, the Colonial Government as well as the employers persuaded the labourers to reindenture or convert their passage money into a piece of land for free and permanent settlement. It was the conversion of the return passage money into a plot of land that led to permanent settlement of Indian communities abroad.²⁶

26. Details concerning the methods of recruiting Indian labour and the conditions under which Indians emigrated can be found in the *International Labour Review* (Geneva) July, 1940, pp 65-76 and July, 1941, pp. 75-76.

must satisfy himself that betterment is likely to result when he decides to emigrate. Acute problems arose however, when the indentured emigrant discovered that he was worse off in the new country, for often the lowest social status is assigned to the latest arrival among immigrant labourers.

To-day, the total number of Indians abroad who were born in India or abroad is slightly more than four millions, or about 1 per cent of the total population of India and Pakistan. A rather rough estimate (for statistics of Indian emigration for earlier years are either incomplete or not available) of Indians who emigrated during the last century, 1850-1950 would be about 30 millions. While this appears to be a large number for any single country, it is not so large in relation to the total population of the sending country and the numbers that returned. In terms of the total population of the sending countries many European countries, including Great Britain, have sent a far greater number of immigrants than India, immigrants who have raised considerably more substantial communities abroad. Compared to European countries, China and Japan, India has not contributed her share to world migration commensurate to the size of her population, history, or needs. Indian emigration started late. Political subjection at home and the fact that new lands were already colonized, though very thinly, proved serious barriers in the path of Indian emigrants.

It is difficult to predict the future possibilities of Indian emigration. The compelling need for Indian emigration cannot be overemphasized. That the Indian of to-day unlike his predecessor half a century ago is prepared to emigrate to distant countries is beyond doubt. He would like to be assured, however, by the government of the receiving country that he would not be discriminated against and that he would be treated on a par with the natives of the host coun-

At the beginning, Indian emigrants were occupationally homogeneous in the sense that they were all labourers. But in the last quarter of a century there has been a more normal distribution of the population. The children and grandchildren of early immigrants have adopted varied professions—at any rate those professions that have come within their reach because of numerous discriminations. However, we find to-day among Indians abroad doctors, engineers, lawyers, teachers, merchants, landlords, factory workers, clerks, peasants, unskilled labourers, and in some countries, members of legislatures and Executive Councils. But it should not be forgotten that Indian emigration was not confined to labourers alone. Businessmen, teachers, lawyers and doctors were among the free emigrants who went abroad to settle and serve the Indian communities that had already settled overseas; hence the present spectacle of normal economic diversification as well as class distinctions like rich, middle class and poor among the overseas Indians to-day.

This fact disproves the charge that is often levelled against the Indian immigrants by the receiving countries or rather the countries that once received them. It is that Indian immigrants as a whole are of a low class and social status, being labourers, and as such they cannot expect to be accorded the same reception and status accorded to Indian visitors of social dignity, intellectual worth or economic consequence. Such a charge can be levelled against practically every other immigrant community. It is not the successful intellectual or the economically stable individual that seeks to emigrate from one country to another. Emigration implies a desire to better one's economic position or social status or escape some undesirable feature of the home country, be it religious intolerance, racial persecution, or economic disinheritance. The purpose of voluntary emigration being, therefore, some form of betterment, the emigrant

sovereign nation and her growing importance as a leader of Asia might help her in seeking emigration outlets in the future. In a shrinking, inter-dependent world where the needs and resources of various peoples may be taken into serious consideration, the chances of permitting, indeed encouraging, overcrowded Indians to emigrate to thinly populated lands may be great.

BIRTH CONTROL

The last and the most important solution is that of birth control. It is too late in the day for India to discuss the pros and cons of birth control. The arguments for and against contraceptives have been advanced *ad nauseam* and the scientific verdict has been in favour of it. Birth control, certainly has a vital role to play in India's population policy, along with the modernization of agriculture and the industrialization of the Indian economy.

Apart from the general rural conservatism of the masses that offers resistance to every reform, there is no organized resistance either by the government or the church as in some countries. Nor are the Indian religions opposed to planned parenthood. It will not be a hard task, therefore, to enlighten the public mind in India as to the benefits of birth control. Once the public health officials begin hammering in its importance, it will spread even to the traditionally forgotten villages. Once Indian mothers are educated in the right belief that there is a scientific device to meet their desperate, albeit latent demands, birth control can easily make headway. There are, of course, certain special difficulties which should be taken into consideration before planning a network of birth control clinics. It should be recognized that a majority of the Indian people live under backward conditions. Matters like bathrooms, running

try. The Indian farm family will be the best emigrants, provided tropical or sub-tropical land could be made available to them in the new country. The Indian emigrant

TABLE 22

THE POPULATION OF INDIANS ABROAD AND THEIR PERCENTAGE
OF POPULATION OF RECEIVING COUNTRIES

Region	Date	Number in 000's	Per cent
Mauritius	.. 1940	272	67
Fiji Islands	.. 1941	102	51
British Guiana	.. 1939	143	44
Trinidad and Tobago	.. 1938	158	40
Ceylon	. 1949	1,972	31
Dutch Guiana	.. 1938	44	29
Malaya	.. 1941	766	14
Aden and Perim	.. 1938	8	13
Burma	.. 1950	1,010	6
Zanzibar	.. 1939	16	6
French Guiana	.. 1938	2	5
Union of South Africa	.. 1947	285	3

is prepared to give up his political allegiance to India, and become a citizen of the receiving country. As population pressure in India becomes more acute increasing demands would be made for outlet into other lands where the Indian immigrant can become a useful citizen. On the other hand, there seems to be no change of heart on the part of the white countries. The erstwhile colonial regions have either regained or are on the eve of regaining their political freedom. It is doubtful whether they would permit more Indians to come in beyond those who are already settled there. But the new status of India as an independent and

Jawaharlal Nehru. One of the Committee's resolutions recommends, "In the interest of social economy, family happiness and national planning, family planning and a limitation of children are essential, and the State should adopt a policy to encourage these. It is desirable to lay stress as well as to spread knowledge on cheap and safe methods of birth control. Birth control clinics should be established and other necessary measures taken in this behalf and to prevent the use of advertisement of harmful methods".²⁸ The resolution is significant enough but goes on to add, "A eugenic program should include the sterilization of persons suffering from transmissible diseases of a serious nature such as insanity or epilepsy".²⁹ This resolution was adopted by the National Planning Committee when India was not free and when the Committee had not the force of governmental sanction.

The Planning Commission set up recently (1950) by the Government of India under the chairmanship of Prime Minister Jawaharlal Nehru, in its Report (1951) rightly points out: "While Family Planning is intended to bring down over a period of time the rate of population growth, immediately it is a step in the direction of improvement in health, especially of mothers and children. Frequent and ill-spaced child births undermine the health of the mother. A high birth rate under conditions of poverty and malnutrition is inevitably connected with a high rate of infant mortality and a high incidence of disease and deformity among children. In planning for a rising standard of life, the provision of a more healthy and joyful existence for children in the formative period of their life is a matter of great importance. Family Planning is thus a vital step in economic and social planning We are in agreement

²⁸ and ²⁹. *Population* (National Planning Committee, Bombay) 1947. p. 6.

water, privacy, cheapness, reliability and the availability of contraceptives, and the illiteracy of women need attention. But no matter what the obstacle, this reform must be pioneered.

Fortunately, this question has not been completely ignored in India. The authoritative Health Survey and Development Committee appointed by the Government of India observe, in their Report (1946), "All of us are agreed that when child bearing is likely to result in injury to mother or infant, there is every justification for the practice of contraception. In such cases, it should be the responsibility of Governments to provide instruction regarding contraception in maternity and child welfare centres, dispensaries, hospitals and any other public institutions which administer medical aid to women. We also consider that the supply of contraceptive requisites should be made free of cost by the State to necessitous women when the practice is advocated for reasons of health. There is also unanimity among us in respect of State action in two other directions, namely, (1) control over the manufacture and sale of contraceptives, as in the case of food and drugs, and (2) assistance from public funds towards research for the production of a safe and effective contraceptive".²⁷

But the most important need in India is to provide contraceptive advice on *economic* grounds. Even this authoritative committee could not shake off India's traditional obscurantism and include poverty and the low standard of living as a pressing reason for adopting contraception and limiting the size of the family.

The Indian National Congress, however, set up during the second World War a National Planning Committee under the Chairmanship of the present Prime Minister, Pandit

27. *Report of the Health Survey and Development Committee* Vol. II, (New Delhi, 1946), p. 487.

HUMAN CONSERVATION

In brief, despite the unprecedented scientific advances in the world during the last thirty or forty years, there is an enormous human loss in India from conception through old age. With all the available resources of scientific knowledge, skill and facilities for protecting people's health, and curing or alleviating the many ills and disabilities to which people are exposed, India continues to waste thousands of human lives.

Living to-day has become complex and difficult compared to conditions a century ago. The majority live in overcrowded villages which have changed their faces but without any sanitary or medical facilities, and those who live in towns and cities find themselves in crowded conditions where earning a living, rearing children and running a home have become a formidable problem. Despite our belief in the intrinsic value of human life as a central tenet of our culture, we have offered resistance to certain reforms that encourage healthy and purposeful living. Long after human erosion and loss have become unnecessary, they persist in India because of certain traditional ideas and beliefs that still linger from the past when we were largely helpless against the diseases and dangers of life and more or less ignorant of human needs and possibilities. To-day, to some extent, much human waste is tolerated because of a fundamentally defeatist belief in man's helplessness against superhuman and mysterious social and natural forces that are supposed to control our social life and make human loss inevitable. Perhaps, not a little of the tragic waste of human life is due to a conviction that human ills and miseries are well merited punishments for our misdeeds and guilt. Many a marvel of medical advance has been more or less opposed as interfering with divine purpose which had ordained human suffering. While belief in "fate" as a controlling factor has lessened, it has not dis-

with the following recommendations and commend them for consideration :

- (a) The State should provide facilities for sterilization or giving advice on contraception on medical grounds.
- (b) Such help and advice should not be withheld from mothers who seek and need it on social and economic grounds. Such services however, should be provided to the extent that personnel in hospitals and health agencies can undertake them consistent with their other duties.
- (c) The State should also, through financial aid and otherwise, assist in the establishment of Research and Information Centres organized for the following purposes : (1) Collection, study and dissemination of information based on scientifically tested experience in our country and abroad in respects of all aspects of family limitation ; and the countering of ill-effects of incorrect information ; and (2) Research necessary for the development of inexpensive, safe and efficacious methods of birth control suitable for all classes of people ; and methods of preparation of necessary appliances and materials based on raw materials available in the country ”.³⁰

India's population problem especially in relation to food supply is distressing enough as it is to-day and any delay will only aggravate the seriousness of the problem.

CHAPTER IV

POPULATION AND FOOD SUPPLY

I

Let us look at this problem of world population and international tensions from another angle — the angle of widespread poverty, hunger, famine and war, side by side with almost endless acres of relatively empty, partially used and potentially useful land awaiting development. If hunger is granted to be one of the basic causes of international ill-will and tensions, this aspect of the problem deserves to be examined from three points of view.

One is the already depressed and ever-worsening low levels of living in terms of basic requirements for human well being, primarily food, in some of the major areas of the world, such as India, China, South East Asia and Russia. *Secondly*, there is the slow, silent and insidious destruction that man has wrought through the centuries by his profound ignorance of cosmography, and his abuse and misuse of land and other exhaustible and limited natural resources. This is resulting in less and less total acreage of cultivation and less and less of per capita yield in many parts of the world. *Thirdly*, it is foolish and criminal in the face of this double crisis of increasing population-cum-low standard of living on the one hand and depleting natural resources on the other, to leave land, small or big in area, idle, preventing its full use because of the interests of cultural, racial and political imperialisms.

No elaborate statistical proof or learned discourse is necessary to demonstrate the existence of world-wide malnutrition and the ever-worsening low standards of living

appeared completely. Such fatalistic outlook persists in every culture and society, but much more so in India, long after it has been rendered obsolete by scientific knowledge which is powerless to displace it. The way out in this matter is to give up clinging to archaic ideas and practices that are no longer valid according to present knowledge, nor compatible with democratic affirmation of human values. The sooner we do this the better and easier will be our approach to human problems of life, longevity and death.

transportation with the introduction of refrigerated cargo space on ships, goods trains, milk cars, and possibly food planes in the future, have rendered the world-wide distribution of food easy. But the sad point is that all these worthy innovations and improvements have not benefited the common people all over the world ; at best they have helped only a very limited segment of the world's population. Hence the problem of international differentials in the general state of nutrition, the per capita food intake, and the availability and distribution of food supplies. Thus, the inter-relation between food supply, balanced nutrition, health and social efficiency, happiness and peace on the one hand — starved bodies, warped minds, discontent, international ill-will and tensions on the other, is too obvious to need any elaboration. All these have a direct bearing on the political and ideological strains and stresses of our times.

A survey of world nutrition constructed on the basis of several national and regional studies of the amount and nature of food production and consumption, reveals, as in almost everything else, vast international differentials. In some countries like Australia, Canada and the United States, where population has been growing slowly, technical revolution in agriculture has brought about a substantial increase in food supplies. But in countries such as India and China, agricultural practices are so primitive that the people are always close to the famine level. Further, while there may be a great deal of surplus grain in the American midwest or the Canadian Prairies, there may be acute hunger in China, India and Africa. Even in the generally well-fed countries there are groups of people that are under-nourished for reasons of poverty, lack of purchasing power and ignorance of modern nutrition. While poverty is the major cause of malnutrition, the factor of ignorance does not lag far behind. The scientists of these countries and the world have accumu-

for a majority of the world's population. In terms of food, clothing and housing, the world's population cannot be said, as a whole, to have progressed in the last half century. After the first World War, J. M. Keynes uttered the warning that the Malthusian devil had broken its chains in a world of diminishing returns. Keynes held Europe's great growth in numbers as responsible for her reduced rations and much of her pre-war and post-war instability.¹ And even before the second World War had got under way Colin Clark found that the Malthusian devil was still abroad and more than half the world's population did not receive (in 1940) a real income sufficient to provide even a subsistence level of living.² If anything, the per capita consumption of these "commodities" had definitely decreased for an overwhelming segment of the world's population.

This, of course, is not true of certain restricted areas of the world like the United States of America, Canada, Argentina, Australia and New Zealand. It is true that in the longer view, in the last-half century, people in the western world have been assured of more abundant, better, and more diversified food, as a secondary result of the Industrial and Commercial Revolutions. To-day, one worker in agriculture is able to produce several times as much food as a hand worker could in 1850 or even in 1900. This agricultural revolution not only brought in direct increased production, but released energy and labour spent in the past on the farm which is now spent on, say, sanitary and other general improvements for human welfare. While agricultural improvements resulted in increased harvests and abundant food for domestic consumption and export, the improved

1. J. M. Keynes, *The Economic Consequences of the Peace*. (London 1920), p. 8

2. Colin Clark, *The Conditions of Economic Progress*. (London 1940), *passim*.

vism cannot be extended to the world as *between* privileged and underprivileged nations. Such a measure would be a right step in the building of the "One World" of our dreams.

International differentials in per capita "consumption" of food, clothing, housing, education, health, recreation and cultural requirements are as immense as inter-class differences. Only the consumption of food need be considered here. The first group of countries that can be said to have a relatively good diet, at least according to pre-war standards and statistics, represents only a very small share of the world's population. Included in this group are the United States, Canada, Australia, New Zealand, United Kingdom and a few Northern European countries like Holland, Denmark, Norway and Sweden. Most of the other countries of Western Europe come next with slightly lower dietary levels. The next group includes countries in Eastern and Southern Europe where diets drop in quality till there is acute dietary deficiency as in the Middle East. The qualitative deficiency of diets in these countries is reflected in certain common diseases such as pellagra, conjunctivitis and trachoma. The fourth category consists of all the countries in Asia, east of Suez. Here gross qualitative and quantitative deficiencies mark the per capita diet. The people of India face acute hunger in times of famine ; even in normal times their food is seldom adequate in quantity and never in quality. The Famine Enquiry Commission (1945) points out that 30 per cent of the Indian population do not get enough to eat in normal times, while the food of a great majority of the rest is unbalanced.³ According to a random sample enquiry on food consumption in Indian villages conducted by Sir John Megaw in 1933, only 39 per cent of the people were adequately nourished, 41 per cent poorly

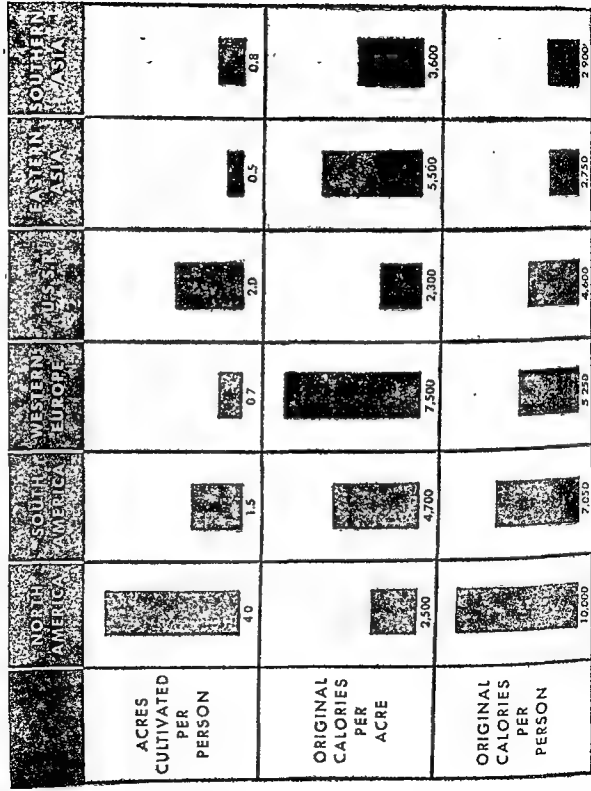
3. *Famine Enquiry Commission : Report on Bengal* (Delhi, 1945), p. 156.

lated a vast amount of knowledge about foods and nutrition that could be highly useful. And yet only a minor part of this knowledge has become the intellectual equipment of even the educated classes. And as for the masses, this knowledge has filtered down so little that the diets of the great mass of mankind are not at all enriched by the available knowledge. However, progressive nations have sought to combat this inter-group inequality in knowledge and consumption of food within a nation by various measures. An important scheme, among such measures, is the provision of milk to infants, pre-school and school children, and expectant and nursing mothers. Its purpose is to ensure priority of supply at low cost to these groups in nutritionally adequate quantities. This scheme takes care of those who may not know the tremendous importance of milk in the diets of these vulnerable groups, and those who may not be able to afford consumption of milk among these groups. There is also provision of hot and nutritious but inexpensive meals to children at school and even food for the unemployed. Such social measures as these not only raise the level of health and social efficiency of a people; they also cut the costs of public health, for from the biological point of view, infection in its broadest sense is basically a nutritional problem. Robust health resulting from good nutrition has beneficent repercussions. It not only reduces deficiency diseases, but increases resistance to disease in general. It saves the time wasted or lost through sickness and suffering and through taking care of those who are sick by those who might be producers. If all this is possible, better nutrition should become one of the major economic incentives for increased production and its chain of happy reactions. If social measures such as these could be undertaken successfully by progressive, national governments to equalize opportunities between privileged and underprivileged groups within a nation, there is no reason why this progressi-

	CHINA PER CENT INCREASE IN POPULATION BY 1960	INDIA PER CENT INCREASE IN POPULATION BY 1960	SOUTHEASTERN EUROPE PER CENT INCREASE IN POPULATION BY 1960	SOUTH AMERICA PER CENT INCREASE IN POPULATION BY 1960
CEREALS (WHOLE GRAIN)	15	39	-3	70
ROOTS AND TUBERS (FRESH)	66	103	26	22
SUGAR	15	25	10	49
FATS AND OILS	58	113	31	65
PULSES, NUTS AND COCOA	59	84	93	70
FRUITS AND VEGETABLES	177	130	78	73
MEAT, FISH AND EGGS	45	105	11	59
MILK (FLUID EQUIVALENT)		60	77	184

Food needs of four regions are given in percentages of their present consumption of various foods. These percentages are required to meet F.A.O. goals by 1960. The percentages are given at the end of horizontal bars.

Food production of six regions is compared. The United States leads in acres cultivated per person and calories per person per day, but it lags in calories per acre per day.



been compelled, to prevent a slump in agriculture, to take billions of dollars of food out of the world market. Lord Boyd-Orr pointed out the vicious circle involved in this great production of food when he said, "The abundant food output of the United States already imposes a heavy burden upon its economy and now has begun to undermine its prosperity. Up to January 31, 1950 the U.S. Treasury had paid out \$2470 million for taking surplus food off the market. In inevitable accord with this policy, production is now being restricted. The 1950 wheat acreage has been reduced by nearly 10 million acres below 1949. A further 10 million acre reduction planned for 1951 would bring total wheat acreage to a little more than 60 million. Since U.S. farmers in previous prosperous years bought industrial goods to the value of \$9000 million per year, reduction in their purchasing power will inevitably lead to urban unemployment. This in turn leads to a reduction in the market for more expensive foods. The consumption of these has, in fact, already declined by 5 to 10 per cent from the post-war peak, increasing the unmarketable surpluses".⁵

While this is the situation in the world as a whole, the countries where population has been growing slowly or even declining and where the modern marriage between agriculture and science has succeeded are the ones which are producing a very substantial increase in food supply. In fact, the supply of food in these restricted areas has grown far beyond the demand for food. Of course, even in such nations where food is relatively abundant and nutrition is on a reasonably high level, there are striking regional, class and occupational variations in the amount and quality of food consumed. But, as observed earlier, those disparities

5. Lord Boyd-Orr, "The Food Problem" *Scientific American* (New York) August, 1950.

nourished and 20 per cent very badly nourished.⁴ As for China, hunger and famine are a chronic state of affairs in some part or other. Japan was an exception before the war and even then the Japanese diet did not approximate to the North Western European diet. To-day, Japan is no better than India or the Middle East. South America approximates to the Indian and Japanese levels. As for Africa, rickets is widely prevalent, pointing to an insufficiency of required nutritional elements. In South Africa, for instance, a Nutrition Survey conducted by the Department of Public Health in 1938 proved the existence of malnutrition in a large percentage of the white school-going population. If this is true of white children, who are admittedly treated as *Herren-volk*, (apart from the poor whites), the nature and extent of mal-nutrition and under-nutrition of native born Negro and Asian children in South Africa can be easily imagined.

The problem of regional differentials in production and consumption of food, whether within a country or in the world as a whole, is not simply one of plenty in one corner and tremendous poverty in another. The picture of plenty is as much a problem as that of poverty. Certain countries such as the United States and Canada are embarrassed by surpluses of food, thanks to modern technology, while countries such as India and China which are faced with chronic starvation may not be able to afford the foreign surplus food grains. Instead of the deficit countries obtaining the necessary food from the surplus countries, the actual approach to the problem at present is simply shocking from even strictly economic or international trade points of view, not to speak of humanitarianism or world co-operation and peace. The United States Government, for instance, has

4. Sir John Megaw, *An Inquiry into Certain Public Health Aspects of Village Life in India* (New Delhi, 1933), p. 10.

TABLE 23

PRE-WAR ESTIMATED PROPORTION OF CALORIE INTAKE PER
CAPITA OF VARIOUS COUNTRIES

(From various sources)

Country	Per cent of calories from cereals and potatoes	Per cent of calories available for consumption from	
		Crops	Livestock Products
Canada ..	30—40	60—65	35—40
United States ..	30—40	60—65	35—40
Brazil ..	60—70	70—75	25—30
Uruguay ..	50—60	60—65	35—40
Argentina ..	50—60	65—70	30—35
Chile ..	60—70	80—85	15—20
United Kingdom ..	30—40	55—60	40—45
Ireland ..	50—60	65—70	30—35
Sweden ..	30—40	60—65	35—40
Norway ..	40—50	60—65	35—40
Denmark ..	40—50	60—65	35—40
Germany ..	40—50	75—80	20—25
France ..	50—60	70—75	25—30
Italy ..	60—70	85—90	10—15
Spain ..	60—70	85—90	10—15
Tunis ..	70—80	—	—
Algeria ..	70—80	—	—
French Morocco ..	70—80	—	—
Bulgaria ..	70—80	85—90	10—15
Greece ..	60—70	85—90	10—15
Turkey ..	—	85—90	10—15
Palestine ..	—	80—85	15—20
Egypt ..	70—80	90—95	5—10
India ..	80—90	90—95	5—10
China ..	80—90	95—100	1—5
Japan ..	70—80	85—90	10—15
Australia ..	30—40	55—60	40—45
New Zealand ..	30—40	50—55	45—50
Union of S. Africa ..	60—70	75—80	20—25

in the consumption of nutritionally balanced diets between groups are being removed by ever increasing national or provincial social measures. The American agricultural economist, Dr. Tolley, points out, "It appears that (1) there are large groups and classes of low income people in the best fed countries of the world who are in need of increased amounts of protective foods, especially dairy products, vegetables and fruits; (2) in what might be called the middle group countries of the world dietary scale, increased amounts of these protective foods for almost all the population should be supplemented by additional proteins for many people, if an adequate level of nutrition is to be reached; and (3) in very great areas as, for instance, India and China and a large proportion of the tropics, there are deficiencies amongst most of the people in almost all phases of their diets, except, perhaps, some of the cruder energy foods".⁶

From the quantitative and qualitative aspects of food consumption, the extent of difference between groups and classes within nations is not as great as that between peoples of different nations. In other words, the efforts to bridge the gulf in standards of living between groups in a nation have been relatively effective, for such efforts have come within the purview of a nation's governmental responsibility. Unfortunately, such efforts *between nations* are completely absent and hence the yawning international differentials, despite the laudable attempts of the F.A.O. and other specialized agencies of the United Nations.

The experts, if not the politicians, are fortunately aware of this situation. The Hot Springs Conference on Food and Agriculture (1943), for instance, declared, "It is useless to produce more food unless men and nations provide the markets to absorb it. There must be an expansion of the

6. Howard R. Tolley, "Agricultural Adjustment and Nutrition" in Theodore W. Schultz (Ed.) *Food for the World* (Chicago, 1945), pp. 166-67.

CALORIES - 1939



 **MEDIUM**
2,250-2,750 Calories per person

 **GOOD**
Over 2,750 Calories per person

A DIFFERENCE OF



or change the mores of the farmers and peasants and those who destroy nature all over the world.

If certain approximations are accepted, the problems of world population growth and the available resources for its sustenance may boil down to this. To-day there are about $2\frac{1}{4}$ billion people in the world. And tomorrow there will be 60,000 more persons than there are to-day sitting down for breakfast. That is, roughly, the world's population is increasing by as much as 20 to 22 million people each year. This is not really many, for in spite of recent man-made and natural catastrophes of a global war, some 17 million people were added annually during the past decade. At this rate there will be some $2\frac{3}{4}$ billion in 1972, only about twenty years away. And half a century from now the total will have reached about 3 billion. In other words, according to one authoritative projection of world population growth, there will be about 3,300 million people by A.D. 2000 !

Are we then too many ? Not necessarily. Even ten or twenty billion people would probably not be too many, if enough food and other necessities and amenities could be found for these people. But we know to-day that roughly about half—probably a little less — of the world's population, most of them in Asia, will go to bed hungry tonight. When the present total food supply is not enough to feed the world, even at the present — say French or Italian or even Indian — standard of living for the world as a whole — either through inadequacy of total production or want of purchasing power or faulty distribution, the world's natural resources and the source of man's food are running dry. This is the second level at which world population problems and international tensions must be tackled.

There was a school of thought not so long ago which believed in the thesis of poverty in the midst of plenty. This school of thought does exist even now, for many of India's

whole world economy to provide the purchasing power sufficient to maintain an adequate diet for *all*. With full employment in all countries, an enlarged industrial production, the absence of exploitation, an increasing flow within and between countries, an orderly management of domestic and international investment and currencies, and sustained internal and international economic equilibrium, the food which is produced can be made available to all people." They further declared, "The primary responsibility lies with each nation for seeing that its own people have the food needed for life and health: steps to this end are for national determination. *But each nation can fully achieve its goal only if all nations work together.*"⁷ This is a tall order for a world torn by ideological conflicts and obsessed with the modern religion of nationalism, but the cost of the change suggested in the declaration would be negligible compared to the cost in human lives and treasure of a possible third World War or even regional wars such as the current Korean conflict.

II

This picture is painful enough, but to-day our ways are such that the situation, instead of improving, is becoming worse. While all the factors listed above are responsible for the impressive international differentials in food availability and consumption, they boil down to two fundamental reasons — the tremendous increase in the world's population and the tragic, almost world-wide depletion of our natural resources. In recent years thoughtful people have become alive to this double crisis, but as is usual in such matters it will take a long time for such intellectual awareness to result in governmental decisions to arrest the growth of population

7. *A Brief Review of Food and Nutrition in Five Countries*. (Washington, D.C. 1945), p. 18.

of the soil declines and eventually disappears. According to Ward Sheppard, "Modern man has perfected two devices, either of which is capable of annihilating civilization: One is atomic war, the other is world soil erosion. Of the two, soil erosion is the more insidiously destructive. War disrupts or destroys the social environment which is the matrix of civilization. Soil erosion destroys the natural environment which is its foundation".⁹

For the past three hundred years and more, to the best of our knowledge, man has behaved toward Nature as though her resources were infinite. It is true that food is a renewable commodity. If the soil is not abused — and here is the big IF — earth will yield another harvest next year, the year after and so on. But the story is different with the ores of the much needed metals. These non-renewable resources, by their very name, can be drawn from the earth in only limited quantities. Some are located at such depths, and in such combinations as to make them extremely difficult or even impossible to obtain. Furthermore, the minerals that we do know about, and can get at without too much difficulty, are distributed around the world in a haphazard fashion from the point of view of human use.

It would be comforting if, once we got minerals out of the ground, we could keep on using them indefinitely. But there is much permanent loss, ranging from total loss, in the case of fuels, to only slight loss — for example in the case of lead used in storage batteries. At present rates of consumption, there is an appreciable drain on the known mineral resources of the world. They are not a limitless source.

The vein of tin or copper deep in the bowels of the earth which yielded this year's copper or tin will not be renewed

⁹ Ward Sheppard, *Food or Famine* (New York, 1948), p. 56.

political leaders, for example, believe ardently that India could feed, clothe, house, educate and provide amenities for India's 360 million people and more at some desirable level of living! They do not believe that there is a population problem or that starvation is in store for a majority unless Indian fertility is controlled. According to this view, such miseries as hunger and starvation as are to be found in India or all over the world for that matter, are partly, if not entirely, due to faulty methods of production and above all, of distribution. The present world of scarcities could be transformed into one of unlimited abundance all over the world, according to exponents of this view, provided mankind accepts capitalism, free enterprise, socialism, communism, currency reform, vegetarianism or Gandhism or whatever the current fad is. In answer to this fashionable and plausible (and vote-getting) hypothesis, which projects human misery on some nostrum untried on a global scale, a recent and a more reasonable school of thought maintains that the problem is not one of poverty in the midst of plenty, but human poverty in the midst of nature's increasing poverty. As Colin Clark points out, "Oft repeated phrases about poverty in the midst of plenty turn out to be the most untruthful of all modern clichés."⁸ This basic poverty cannot be cured by tinkering with this political system or that economic order. To effect a cure, man must understand the organic unity of mother earth and nature as a whole. Want of this understanding and realization of this truth (of nature's organic unity) have led to man's blind, insidious, unknowing war on nature for a long time. This war has resulted in soil erosion and depletion of natural resources. As the population increases, as forests are destroyed to make way for habitation and timber for housing, and as man burns the fields and moves on shifting his cultivation, the fertility

The American and Canadian agricultural surpluses are far from typical of the rest of the world. Even these surpluses are obtained at the cost of the longevity and perhaps the very life of the land itself. This wearing away and washing out of the precious soil is not restricted to one country or region. It has spread like an epidemic. With the exception of a few small areas in North Western Europe, forests are not being used on a sustained-yield basis; they are being inexorably wiped out. Grasslands almost everywhere are being overgrazed. Water tables are falling; rivers are overflowing and changing their courses. Nature is losing her balance. Man's ignorant and destructive hand has set the ball of disaster rolling.

Besides this mismanagement, man's greed for monetary returns prevents him from making the best use of land; perhaps nowhere in the world is land used to produce the crop that is best suited for the soil on a permanent basis. Cash crops that would yield quick returns are raised instead. The general economic laws that operate in industry are sought to be transplanted to the soil, disregarding the basic physical and biological laws that govern the wellbeing of the soil. According to William C. Vogt, the greatest villain in the current human tragedy of soil destruction is the uncontrolled raindrop. The hydrologic cycle—the movement of water from the air to the land and eventually back to the air, usually by evaporation from the oceans—is broken and in so doing available waters are critically reduced, resulting in floods and progressive erosion of the soil.

In its natural state much of the land is covered by a vegetative mulch which absorbs rainwater and releases it downwards by slow gravitation. The forest land itself, for example, holds back so much water that it is of the highest value in flood control. When the trees, grasses and other plant-cover are destroyed by axe, plough, fire or grazing

in years to come. Of course, man can move on to another deposit of the mine when a lode is worked out. But there will come a day — in some regions the day has arrived — when there will be no mines. Then the miner cannot move on.¹⁰

In general, in all patterns of human society, man has maintained a purely extractive economy, taking the bounty of the earth and contributing little in return. He has so misused the land that the top soil, an inch or two of which takes centuries to build, is blown away in one rainy season. He has so deforested the land that soil is depleted of its needed moisture. Where man has not actually lost soil and water, he has overgrazed and overcropped. By destroying plants and animals in his endless greed he has disturbed and upset nature's ecological balance. He has forced the land to lose its soil minerals, broken down the all important soil structure and has thus laid his environment under exhaustion that will take perhaps centuries to recover.

While man's thoughtless destruction of his natural environment all over the world differs from region to region only in detail and pattern, it has nevertheless left behind impressive national and regional differentials in the carrying capacity of different lands. Apart from soil erosion, inherent soil fertility depends upon the particular agricultural practices, sunshine and rainfall, plants and animals, and above all man's deposits in and withdrawals from nature. These factors vary so widely from place to place that no two paddy or cotton fields will produce, even theoretically, the same amount of food or fibre. When the cultural differences of the world's farmers, for example as between the Indian peasants and the American farmers, are taken into consideration, the yield varies even more widely.

10. Aldous Huxley, *Themes and Variations* (London, 1950) last chapter on "the Double Crisis" *passim*.

land per capita naturally decreases, which means low productivity and a lower standard of living. Remembering that the international differentials in standards of living are already impressive, mankind cannot afford to lower the present standard of living, which is by no means high. In the face of this crisis, it does not make sense to talk about the dignity of man or the declaration of human rights in overcrowded India or China where men cringe, crawl and beg for a bowl of rice or a copper coin. How can there be human dignity or four freedoms when half the population in certain regions of the world dies before it is ten years old, or where men have to do the most abject piece of work for a two anna wage. The way out for mankind is to ensure that land and other renewable resources are used to produce as much wealth as possible — not by destroying their inherent fertility and wealth and then by harnessing science and trying to replace natural wealth by not-so-competent scientific devices: and above all, not to exhaust our resources which have no substitutes, but by overall global conservation. The ever-increasing demands on these limited resources should be met not by increased exploitation but by curtailing that demand. This means curtailing the population growth and thus balancing the population numbers according to land's carrying-capacity. In the words of Aldous Huxley, "The giant misery of the world cannot be mitigated by inspirational twaddle but only by an intelligent attack upon the causes of that misery".¹²

Thus, while it is true that soil erosion and exhaustion, deforestation, lower water-tables, silting up of streams and allied developments, have brought and will soon bring results more serious than the permanent loss of certain mineral resources, it does not mean that there is no way out and that mankind is doomed to perish as a result of

■ Aldous Huxley, *op cit.*

animals, the mulch of vegetative accumulation on the soil begins to disappear. Presently the top soil itself starts washing or blowing off and an all but imperceptible sheet erosion will be followed by dramatic gully erosion: changes in soil structure contribute to the process. The ideal soil such as is found on prairies is granular, and such soil permits optimum infiltration of rainwater. When granules are broken down by improper cultivation and destruction of organic matter, the soil packs and becomes denser. When hard rains occur, the now smaller interstices rapidly become waterlogged, and since the water cannot find its way downward through the soil, it must run off the surface. Rapid run-off not only causes catastrophic floods, it carries away the soil to silt up the lakes and reservoirs. According to Vogt, "One of the most powerful forces influencing infiltration, run-off, and therefore soil erosion, is the substitution of agricultural crops for natural plants. Row crops, such as soyabeans, uncontoured cotton, corn—including hybrid corn!—and tobacco will lose 100 or more times as much soil as will woodlands, forests and undisturbed prairies; and such small grains as wheat, oats, barley and rye will lose 16 to 40 times as much".¹¹

This soil erosion is not confined to Australia or the United States. Man's ignorance as well as abuse of the soil for centuries have left their impress almost everywhere. Mexico and Chile, the United States, Greece and Italy, the Middle East, India, China, Japan and Australia bear witness to the greedy depletion of non-renewable resources, progressive degeneration of covering vegetation, increasing losses of desperately needed water and ever aggravating soil erosion. Only drastic population limitation and conservation of natural resources can save the situation. As population increases arable

11. William Vogt, *Road to Survival*, (New York, 1948), p. 97.

It is not out of the realm of possibility, however, to stop practices that lead to soil erosion and man's starvation all over the world. Improved techniques for resource development and conservation, even on the basis of current admittedly inadequate knowledge, if widely applied, promise substantial prospects for mitigating the problem. The results of such knowledge may not be estimated statistically but prospect for the morrow may be a little better if existing knowledge were put to practical use all over the world. Much has been written about soil erosion in the United States of America, Australia and the Middle East. The United States, which can boast of a remarkable Soil Conservation Service and where agricultural practices are generally based on latest scientific knowledge, has been recently shocked by revelations in such excellent, if necessarily alarmist, studies as William Vogt's *Road to Survival*, Fairfield Osborn's *Our Plundered Planet*, Elmer Pendell's *Population on the Loose* and Robert C. Cook's *Human Fertility*. And all this in a country which has the highest standard of living in the world, and where the modern religion of science is harnessed to problems of daily living and where the contraceptive habit is widely prevalent. But here in India where population grows unchecked and dies unhonoured and unsung, soil erosion has become a terrible problem. And yet the people—seventy per cent of the population is dependent on the soil for a livelihood—are completely ignorant of this silent and insidious war in their midst which is slowly destroying the very basis of Indian civilization. But the Government, which is still obscurantist enough to pursue a policy of *laissez-faire* on the population question, has recently started a policy of reafforestation and tree planting—*Vana Mahotsava*—but it is not known how many official saplings have taken root in a soil that has lost its fertility on account of tremendous population and bovine pressure. The Government talks of extending cultivation

the eventual complete exhaustion of renewable and non-renewable resources of the earth. Again, in conservation practices, just as in everything else, there are tremendous international differentials. It must be remembered that even an advanced country like the United States started a government soil conservation service only as recently as 1935. Then there are countries such as India where there is no soil conservation service at all. Despite the fact that America takes better care of her land than most other countries, she has experienced dust bowls, silting up of rivers and falling water-tables.

The Soviet Union, which has accomplished marvels in many directions, in spite of her late start and economic handicaps, has done virtually nothing to check soil erosion. "A partial explanation for the low yields may be soil exhaustion", writes John Fischer. "Russia's land has been heavily cropped for centuries, and the Soviets have not yet been able to manufacture anything like enough artificial fertilizer to restore it. Moreover, the replacement of horses by tractor has sharply cut the supply of natural manure. Another partial explanation is low rainfall—seldom more than eighteen inches in the best farming sections of the Ukraine.

Yet when all such allowances have been made, it is still clear that Russian farming is curiously—and unnecessarily—behind the times. Virtually nothing, for example, has been done to check soil erosion. Thousands of acres have been badly gullied or scalped by sheet erosion, as any plane traveller cannot help but notice. But I never saw a single terrace or check dam anywhere in western Russia. Even contour ploughing is entirely unknown".¹³

13. John Fischer, *Why They Behave Like Russians* (New York, 1946) p. 214.

sion and the declining fertility of the soil one of the greatest problems facing India to-day. The importance of the forests on the hills was not realized till recently and forests were treated as part of the village communal estate. The villagers felled the trees for fodder and firewood, grazed their herds and flocks and what was left was destroyed by goats and sheep. The bovine population pressure is more intense than the human population pressure, for India has nearly a quarter of the total cattle population of the world—and most of it a useless burden on the land.

This is not all. The fuel problem has become so acute that trees are being felled indiscriminately; even the stately eucalyptus trees on our beautiful and bracing hill stations such as Kodaikanal, the Nilgiris and Mount Abu are not being spared. In big towns and cities fire wood is being rationed in one way or another. As India cannot afford gas or electricity, wood and animal manure have to be used as fuel. With the present rate of population growth even the lowly cowdung may have to be rationed! Instances of deforestation, soil erosion, falling water tables and vanishing vegetation can be cited from every state of the Indian Union. And yet, the Government is dedicated not to a bold policy of population control but to one of reduced mortality and a higher standard of living. But nobody seems to know how or when this incredible feat which will be nothing short of a miracle will be performed. In the meanwhile, India's population grows by more than four millions a year.

What then is the way out of soil erosion? Can land ever be treated as a sacred trust to be used with care and passed on as a legacy to generations yet unborn? Perhaps a five-pronged drive may accomplish this result in the long run. But it is easier said than done. The first is scientific knowledge; the second is wide dissemination of that knowledge; the third is the appropriate organizational

and bringing more land under the plough and making India self sufficient in food grains by 1952! But all the while, unknown and unseen, the precious top soil is being blown or washed away both in times of summer drought and monsoon deluge. While the soil experts say that it takes 300 to 1000 years to build an inch of top soil, we do not know exactly how fast we are losing it. Not only is there no significant addition of new land but the little available land is being lost by the encroachment of the sea and the sands of the desert. For instance, across an area of some 80,000 square miles, stretching from the Great Rann of Cutch to the Valley of the Sutlej, the desert has been marching stealthily but steadily, night and day, converting cultivated acres into barren, sandy wastes. For years, perhaps centuries, the Rajputana desert has been on the march, choking India's right lung with salt and sand. For about six months in the year, during both summer and monsoon months, high north easterly winds which develop in this region carry vast quantities of salt and sand to the Rajputana desert, whence furious dust storms sweep across the whole north-west India. Thus the desert has spread through the years causing the Indus to shift towards the west and the Sutlej towards the north.

All over India, whenever rains fail or even in summer, ponds, tanks, lakes and wells almost dry up and water recedes to such low depths that drawing it by bullock-power becomes a formidable problem. In recent years, this experience of drought is becoming almost a nightmare to the agriculturists. In Andhra-desa, water tables have fallen so low that one has to dig 300 feet, as in Guntur, before any water can be sighted at all.

There are no statistics of the extent of the area affected but according to Sir Harold Glover of the Indian Forest Service, soil erosion, at a very low estimate, is seriously lowering the productivity of some 150 million acres. He considers ero-

The more modernized they become in adopting the latest preventive, diagnostic and curative medical services, the more rapidly will they cut down their death rate including infant and maternal mortality rates. This welcome feature will only aggravate the problem by further accelerating the rate of natural increase. This does not mean that we should close down the hospitals and ban the medical profession, for on humanitarian grounds alone such a step could not be contemplated; apart from the evolutionary need to pass through this proliferating stage to attain eventual demographic balance between births and deaths on the one hand and numbers and available resources on the other. It is true that these countries may eventually adopt methods to limit population growth. But it is also true that the cultures in these countries—mostly Asian—will, for some years to come, offer resistance to voluntary restriction of the family size. In the face of this over-all socio-economic-demographic situation, *it appears almost criminal to hold certain sparsely populated and relatively empty lands out of use for political, racial and imperialistic reasons.*

Where are these lands and what are their possibilities? And what are the obstacles to their proper development and utilization? These lands, as we have seen already, range from Australia, Brazil, Canada, Argentina, Central Africa, Siberia and Manchuria to New Guinea, Borneo, Solomon Islands, New Hebrides and New Caledonia. A survey of the economic—primarily agricultural—possibilities of all these regions is unnecessary for our purpose for reasons discussed in an earlier chapter. However, the areas in the tropical Pacific such as New Guinea and Borneo, where a sparse native population and an extremely small white population exist, may be reviewed as possible receiving countries for future Asian emigrants.

techniques for efficiently implementing that knowledge ; the fourth is capital resources or sufficient surplus in terms of productive effort over current consumption to execute the project on a global scale; and finally, to bring every available piece of land under careful and studied development according to the best land practices. It does not matter where this land is or who the present owner is. If there is anywhere land that is not used for racial or imperialist or "dog-in-the-manger policy" reasons, such land should be turned over to those who could profitably cultivate it and increase the world's food supply under the direction, if necessary, of some international authority.

III

While no attempts are being made to reduce the impressive international differentials in standards of living and all that they imply, a "double crisis" as pointed out already is brewing over most of the world, particularly in the countries where population pressure is most acute. In these problem areas, to repeat, total food production or availability is not only not keeping pace with the growth of numbers but what is worse, desperately needed land is gradually, if imperceptibly, going out of use through man's ignorance, greed and abuse of the soil. Besides the tired and worn-out soil, some non-renewable resources are also being depleted at a rate which is bound to bankrupt the civilized world in the foreseeable future.

These trends are depressing enough, but what makes the situation more grim is that the countries that are suffering from overpopulation are the ones that have great potential for population growth. These countries are adopting (and they will increasingly adopt in the future) methods such as improved and widespread public sanitation, hygiene and general and specialized health services.

Both Australia and Holland have imposed on New Guinea a typical colonial economy — one that extracts and exports raw material with the aid of foreign capital and such native labour as is available. The island's agricultural development is thwarted by both the governments' desire for quick returns and the want of skilled agricultural labour. Native agriculture is in the most primitive condition and nothing has been done to improve it, for the adult male population is indentured to work on a purely extractive economy. Between the native and the soil there is nothing like a peasant proprietorship. All this has disrupted the native cultural pattern. Felix M. Keesing, while discussing the abuse of native labour by white employers, observes, "Native society and ideas are being greatly influenced by the fact that natives spend such periods away from the villages in the service of the white employers. A large proportion of the adult male population of Melanesia has by now been through this experience. In the New Guinea Mandate, for example, official statistics of June 1938 show that more than 22 per cent of the adult males (41,850 out of 187,000) were actually then under indenture as labourers. The figures for Papua and the Solomons are considerably smaller, yet some communities have as high a proportion of their men away. *Even so, a problem of labour scarcity looms large today in all three territories, particularly in New Guinea, as the Australian and British Governments have kept to a policy of using native labour instead of introducing labourers from outside.*"¹⁴

Every writer on New Guinea is agreed both on the availability of good agricultural land for raising a variety of rich tropical products and the unavailability of agricultural

14. Felix M. Keesing, *The South Seas in the Modern World* (New York, 1941), p. 31.

New Guinea, or Irian as it is now called, is the largest island in the Indonesian Archipelago with an area of about 312,000 square miles (312,329) or roughly about two and a half times the size of the British Isles. The political sovereignty of the island is still under dispute. Indonesians claim it, perhaps rightly, on their right to take over all the territories of the ousted colonial government. Australians, not satisfied with their policy of "White Australia" would not agree to the transfer of Irian sovereignty from the Dutch to the Indonesians. The Americans, who have no imperialistic ambitions, would like the island, a vital strategic area, to be in friendly hands, though it is difficult to say who is a friend just now — in international politics, friends and foes exchange roles with an irritating frequency. Thus, while Indonesia claims the whole island, the Dutch still retain about half the island (160,692 square miles) in the West. The rest, including Papua, is under Australia as a trust territory. But it is clear that no matter who holds sovereignty over Irian, the Dutch and the Australians cannot permanently colonize the region or thrive there, for the total white population on the island today is less than one per cent of the island's population.

The natives of the island — the Irians — number about a million and a half according to the latest estimates, though no census has ever been taken of any one of the three political divisions. The density per square mile varies from 6.3 to 2.0 and the mean density for the island is about 4 per square mile. The land is not inhospitable. Though the terrain is mountainous there are a number of rivers with abundant water supply. The average annual rainfall is about 100" and the temperature ranges from 73° to 92° and the island enjoys a climate comparable to that of South India.

In 1937, ten years later, in a Report submitted to the International Studies Conference, Karl M. Pelzer pointed out that the Pacific Islands, particularly New Guinea, British Solomons and New Hebrides, could gain immensely through immigration of Asiatic labourers. There is no reason why a variety of much needed tropical products could not be raised on these islands. New Guinea is rich in timber and minerals. Sugarcane, coffee, tea, cocoa, rubber, nutmeg, vanilla, bananas, tobacco, sisal and cotton are some of the products that could be raised most widely in the Pacific and especially in Melanesia. Such a significant and possible contribution to world food production, despite the present global scarcity of food, is prevented by colonial, imperialist and racial prejudices of a bygone generation.

After discussing the Japanese population problem vis-a-vis the islands in the Pacific, Pelzer points out what is really the short term answer to the over-populated Asian countries such as India, China and Japan. He concludes, "The development of vast, unused areas of the Pacific would in this way be facilitated and at the same time means be found to alleviate the population problems of the Asiatic countries, particularly Japan. Political obstruction has so far been the main obstacle to Japanese migration in the Pacific beyond the areas of Japan's political control. A peaceful economic and agricultural development of suitable parts of Dutch, British, French or American possessions in the Pacific by Japanese capital (if no other capital is available or interested) and introduction of Japanese labour along lines that have been tried out in Brazil, Hawaii, the Japanese Mandate, Davao, or in Fiji with Indian labour, could only serve to increase production, trade and economic life in the Pacific and might ease some of the frictions and tensions existing to-day. Where lies the greater danger to

labour acclimatized to the tropics to work on these lands. Some thirty years ago this was pointed out in an official publication. "It is indeed impossible to study the Annual Reports without forming a conviction that the territory (Papua) possesses many thousands of acres of agricultural land as fertile as any in the tropics, much of it in regions of reasonable accessibility. There are immense flats of alluvial soil suitable for the cultivation of cocoanuts, rubber and sugar; in higher altitudes there are lands admirably fitted for coffee and tea; and almost all tropical products can be grown in one part of the country or another."¹⁵

In 1927, S. H. Roberts reached the same conclusion after a detailed enquiry into the carrying capacity and economic possibilities of the Pacific Islands. To him, the main reason for the arrested economic life of New Guinea is the shortage of labour. He found a shortage of labour everywhere, and the only solution was to permit Asian immigrants who could provide agricultural labour and develop the land. He pointed out, "There was no alternative, no middle way. This way lies the future of the Pacific, if facts and logic mean anything. The writing is clear for him who will read. A simple process of elimination arrives at this result only — that Asiatic immigration is inevitable, and more, that it is desirable. Events have been tending in this direction for a considerable time, although administrations have not always liked to face the rather unpalatable fact that the development of their lands — French, British and American alike — is completely dependent on Asiatic labour supplies."¹⁶

15. *British New Guinea: Handbook* prepared under the direction of the Historical Section of the Foreign Office. (London, 1920), pp. 40-41.

16. S. H. Roberts, *Population Problems of the Pacific* (London, 1927), p. 282.

United States, Canada, Australia and New Zealand should have no trouble in recognizing the fundamental differences between the actual settlement of a country by a people who work the land, open the mines, build the railways and operate the factories and the exploitation of the colonies by a small master class using cheap native or imported labour, but we seem to have forgotten it rather quickly. On the other hand, we now claim that natives' rights must be respected as against the Asiatics who can use these lands and will almost feel the need for them in the not distant future."¹⁸

The conflict between Holland and Indonesia over New Guinea is still unsolved. But it is to be hoped that Holland will give up New Guinea more gracefully than she did Indonesia itself. Here Holland might perhaps take a lesson from the present Indo-British relations. The voluntary transfer of power from Britain to India has only strengthened the ties between the two countries. As for the trust territory, it has changed hands often enough and the *status quo* need not be considered sacrosanct. One more change in ownership, now into the hands of some Asian country which needs it most, and which could colonize and develop it would not hurt it. The island was in German possession from 1886 to 1914. The Germans could not settle there. Nor did they develop the land for the benefit of the natives. As a result of the first World War Australia was given the mandate of the territory. The mandate included all the former New Guinea Protectorate with the exception of the Samoan Islands and Nauru. In 1942 the Japanese armed forces occupied the island and with the termination of hostilities Australia reoccupied it in August 1945. To-day, on a land of about 93,000 square miles some 3000 Europeans

18. Warren S. Thompson, *Population and Peace in the Pacific* (Chicago, 1946), p. 47

peace — in the forced upkeep of the *status quo* or in a peaceful change in these laws, at least in areas where Western powers can never expect to settle their own subjects and where economic development is now impossible because of the quality of native labour, but where Japanese labour and Japanese peasants will be successful because the Japanese are themselves tropical colonizers "17

Even after the second World War, which was partly the result of the imbalances of population numbers in relation to total economic opportunity in the Pacific, there seems to be no change of heart on the part of the Western powers. It is true that Japan lost the war and the United States occupied her islands, but this does not ensure peace in the Far East. The basic problems inherent in the uneven growth of populations in Asia and the West have not been solved. With the recent Japanese peace treaty, Japan regained her lost political freedom but with only bleak economic prospects for her present and future population. With an empire fairly endowed with natural resources Japan found it difficult before the second World War to give her population a rising standard of living. Now her position is worse with the loss of her empire and with no immediate prospect of any marked decline in her numbers.

And yet, the general political and economic picture in the Pacific has not changed these thirty years, for, as Dr. Warren S. Thompson points out, "The slow development of New Guinea and the rapid development of Japanese Mandate illustrate the difference between control of an area by a people who will exploit it only as a colony and control by a people who will actually settle it and work the land with their own hands because they need it. We in the

17. Karl J. Pelzer, "Japanese Emigration" in Isiah Bowman (Ed.), *Limits of Land Settlement* (New York, 1937), p. 194.

No census has ever been taken of the total population but estimates put the figure at less than three millions, of whom 60,000 live in the British controlled area and the rest in the Indonesian territory. Apart from a handful of Europeans, there are small groups of Chinese, Arabs and Malaysians, the rest constituting the native "aboriginal" inhabitants — the Dyaks.

The island is comparatively rich in mineral resources and yields bituminous coal, gold, copper, tin, nickel and oil. The exact yields of these minerals are not available but it seems possible that they could support several large-scale industries, if the entire island can be developed as an independent productive unit, instead of the present partial colonial status. A population of two and a half millions in an area of some 290,000 square miles yields a low crude density of 8.5 persons per square mile. While the soil is not too fertile the island can easily carry many more times its present population. But here again the problem is one of inadequate agricultural labour — an agrarian Asian population which would settle down and work the land. It is to be fervently hoped that the Indonesian part of Borneo — or Kalimantan to give its Indonesian name — will be developed by the nationalist government and a part of the vast poverty-stricken population from the nearby overcrowded Java will be settled on this island. A great amount of capital and technological skill would be needed but an Inter-Asian corporation created for this purpose can help not only Indonesia but other overcrowded Asian countries crying for emigration outlets. Once Borneo and the Outer Islands are developed, Indonesia's population problems can be solved at least to the extent of ensuring a decent standard of living for her seventy-five million citizens.

As for British Borneo, it is the same problem again — lack of an Asian peasant population that would settle and

hold sway over an indigenous population numbering not less than a million and a half.

What about Borneo? The second largest among the islands of the Indonesian Archipelago and fifth largest island in the world, Borneo is the most dominating and least crowded island in the group. It occupies an area of some 290,000 (293,496) square miles and is comparable to the combined areas of Madras, Bombay, Mysore and Orissa States or almost as big as England and France put together. The island enjoys a warm and equable climate, the temperature ranging between 72° and 93°. With a torrential rainfall averaging about 160 inches per year and about forty well-watered rivers, Borneo has enough water for all the year-round irrigation purposes. These rivers, particularly the Baritos and the Kapuas, not unlike the Cauvery, bring down a lot of silt which goes to make up the fertile coastal alluvial plains.

The island seems to have been settled by Malayan immigrants who set up a Moslem kingdom during the 12th century. Later, the Javanese Hindus conquered the Kingdom. Contact with the West came in 1521 when the Spaniards "discovered" Borneo. The Portuguese came in 1609 to be followed by the Dutch who established their first factory in 1643. The Dutch withstood an unsuccessful British attempt at capturing the island though the latter obtained the northern tip comprising an area of 31,000 square miles with an estimated population at present of 270,000. Another area ruled by the British "Rajah" Brooke was Sarawak which has recently been ceded to Britain by the last "Rajah". Brunei is another area of 31,106 square miles governed by a Moslem Sultan under British auspices. The largest block has been the Dutch territory covering an area of 212,000 (212,737) square miles, now ceded to Indonesia.

CHAPTER V

POPULATION AND PEACE

The problem of peace is vitally related to the question of population. The population problem in its relation to peace has two fundamental aspects — those of quantity and quality. How many people? And what kind of people? Wars through the ages and particularly in our own time can be explained largely in terms of these two aspects of population. It is true that the causes of war are manifold and sometimes obscure. But whatever may be the direct and immediate causes precipitating nations into war, the basic or ultimate causes are the conditions under which people live and work. These conditions, which constitute the standard of living of a people, arise from international differentials in land area including resources and population numbers. When population increases in any limited area, the quest for new land begins. Land hunger leads to war. The cause may not always be as simple and direct as it was in the case of German demand for *lebensraum* or Japan's desire for emigration outlets. Sometimes the cause takes the form of a struggle for markets, a quest for raw materials or a search for avenues of international trade. No matter what the disguised form, the element of population pressure does enter into war. So long as the problem of making a living constitutes man's major task, and so long as earning a living depends ultimately on land, the area of useful land and its resources available to any nation will constitute the crux of our international relations. Since the area of the world's land, barring the conquest of the moon and other planets apart from ours, is limited, there are only two ways by which any nation can increase the land at its disposal. One is to

work the land. As Lord Milverton recently pointed out, "The great and final problem for all British Borneo is labour. From what source are the migrants to come to help in populating and developing her empty spaces? From Malaya, Java, or the Philippines? One of the most cogent reasons for avoiding excessive haste is the political problems which may follow in the train of unregulated immigration. Borneo needs citizens who will make the country their adopted land, not groups of aliens whose loyalties will remain centred elsewhere. It is desirable that the lessons of Malaya be taken to heart and that settlers from other lands come under the system of education which will fit their children for Bornean citizenship."¹⁹

Then there are other islands in the Pacific awaiting cultivation and development. Individually they are not large or dominating as New Guinea or Borneo but altogether (including these two) they cover a considerable area amounting to some three million square miles—an area that can hardly be neglected in a shrinking world of population pressure and food scarcity. All that is needed is a peaceful change—a silent social revolution that would transfer some millions of Asian people from their overcrowded native lands to these empty regions. Indonesia must be helped to reclaim the marshes, deserts and forests in Borneo and settle some of her surplus population from Java and Sumatra. China could be assisted in settling some of her teeming millions in Manchuria, as she indeed has begun to do. Japan and India could be permitted to settle in and develop New Guinea and other empty and undeveloped areas in the Pacific. Such planned, peaceful Inter-Asian and Far-eastern population transfers would benefit both the sending and receiving countries in countless ways in the years to come.

19. Lord Milverton, "Borneo Today" *Spectator* (London, 3 May, 1949).

power and the relation between population growth and aggressive militarism in Germany was not quite so obvious then but it has nevertheless proved to be a very important factor. Dr. Thompson's warning was prophetic, but to an indifferent world that was to suffer the agony of two World Wars in one generation, the population problem continued to be merely an academic question. But not for the war-mongers themselves. General Von Bernhardt, building up the psychological background of the first World War, pointed out that, "Strong, healthy and flourishing nations increase in numbers. From a given moment they require a continual expansion of their frontiers; they require new territory for the accommodation of their surplus population. Since almost every part of the globe is inhabited, new territory must, as a rule, be obtained at the cost of its possessors, that is to say, by conquest, which thus becomes the law of necessity."² While discussing the role of population problems in the first World War, Dr. Louis I. Dublin, the American statistician, pointed out in 1924, "The (first) World War was essentially an outgrowth of pressing population problems which confronted the nations of Europe ten years ago. The peoples of Central Europe were overcrowded. Each country needed room for expansion and desired additional markets and colonies where surplus peoples could be accommodated and food could be raised for the use of the homeland. Germany, more than any other country, was striving for a place in the sun, and found her borders shadowed on the one hand by France and on the other by Russia. To make matters worse, she felt a sense of superiority to France, whose population she had far outstripped in numbers. The year 1914 seemed an opportune time to strike for more territory. *The fears engendered in*

2. General Von Bernhardt, *Germany and the Next War* (London, 1911).

appropriate land hitherto unoccupied by any human group, and the other is to take land away from someone else. Even the colonization (or really early conquest) of the Americas, Australia, and New Zealand comes under the second category. The modern quest for land or the variables of its economic equivalent can only mean one thing—war. Though the relation between over-population and war may appear controversial and may not be obvious, it has now been more or less conceded that population pressure or its material and psychological consequences has been an important factor in almost all international tensions and wars.

The last two World Wars, to take only the two major international conflicts of this century, leave us in no doubt about the causative relation between population growth and war.¹ Dr. Warren S. Thompson, in his book *Danger Spots in World Population* (1929) published some twenty-three years ago, pointed out that in certain areas of the world where population pressure was so great and increasing so steadily, some kind of violent upheaval was bound to occur sooner or later. Two of these regions were Italy and Japan. As for Germany, the book was written before Hitler came to

1. Some eminent historians have considered population pressure an important cause of war. In many wars the population factor was latent and was hence lost sight of in view of the more spectacular immediate causes. The apparent cause of war is seldom the real one. The following is an example: Pope Urban II at the Council of Clermont, inaugurating the First Crusade Wars observed, "Let none of your possessions detain you, no solicitude for your family affairs, since this land which you inhabit, shut in on all sides of the sea and surrounded by mountain peaks, is too narrow for your large population; nor does it abound in wealth; and it furnishes scarcely food enough for its cultivators. Hence it is that you murder and devour one another and wage war and frequently you perish by mutual wounds. Let therefore hatred depart from among you, let your quarrels and wars cease, and let all dissensions and controversies slumber. Enter upon the road to the Holy Sepulchre, wrest the land from the wicked race and subject it to yourselves. That land which, as the Scripture says, 'floweth with milk and honey' was given by God into the possession of the Children of Israel."

It is not enough that they suffer from population pressure, but it must be, as Warren Thompson points out, "felt population pressure". It is not those who are absolutely poor that start wars, but usually those who have something, some resources, and who want more that can afford the luxury of war.

The history of mankind has been essentially the history of hunger. If not absolute hunger, at least the desire to satisfy hunger with more and better food. According to Frank A. Pearson and Floyd A. Harper, "Although wars may arise from a wide variety of causes such as the ambitions of the ruling classes, religious differences and the like, most of them arise from actual or imagined economic differences. Hitler stated the fundamental cause of war very simply and clearly — more *lebensraum*. *Since there are so few of the good things of life and they are so unevenly distributed, there is plenty of incentive to attempt to redistribute them.* (Italics mine). Past history does not indicate that this equality will be established by voluntary or peaceful methods. It is more likely that the stronger groups of men will seize, or attempt to seize, fertile valleys, plains or countries from their weaker neighbours, if they feel that they do not have adequate food supplies. World Wars I and II were attempts at redistribution, and as pressure of population on the food supply increases, there will be more. The more integrated and interdependent the relationships between the continents become, the more likely it is that troubles will arise."⁴

Mussolini, holding that Italy had always been and intended to remain a prolific nation, stated, "It will be necessary that even this young Italy of ours make itself a little

4. Frank A. Pearson and Floyd A. Harper, *The World's Hunger* (Ithaca, 1945) p. 76.

France and Russia by an ever growing Germany contributed to a state of mind which made war inevitable. This is an outstanding example of an almost universal condition."³ (Italics mine).

As for the second World War and Hitler's claims for *lebensraum* for Germany's growing population, they are too well known to need repetition here. Hitler, in his reply to President Roosevelt's peace telegram in April, 1939, said, (comparing Germany with the U.S.A.) "It should not happen that one nation (the U.S.A.) claims so much living space that it cannot get along when there are not even 15 inhabitants to the square kilometre, while other nations are forced to maintain 140, 150 or even 200 in the same area. But in no case should these fortunate nations further curtail the living space of those peoples who are already suffering by robbing them, for example, of their colonies." According to the Nazi experts, "Germany was the only genuine 'have-not power' with grossly inadequate living space". It is not necessary that these difficulties, economic and otherwise, should be real and genuine. Even imagined grievances, if buttressed home strongly enough, can touch the tinder box and start trouble. And people who feel that they have nothing to lose and everything to gain by use of force are easy victims for ruthless and ambitious rulers who want to exploit the masses to attain their own political and economic ends. This, perhaps, explains why certain nations which are in obvious and serious economic difficulties do not go to war.

3. Louis I. Dublin, *Population Problems* (Boston, 1926) p. 3.

According to Jacques Bainville, the French historian, Germany's population pressure was a cause of the First World War. "Germany with an excessive population and industry was pushed to the conquest of outlets and territories, the desire for which acted upon the Socialist masses just as upon the upper classes....Germany wanted war. She had too many men. She was, as in the ancient times of history, pushed to invade her neighbours." Jacques Bainville, *Histoire de France* (Paris, 1924) pp 541-547.

heavy odds was no surprise. A book by Albert E. Hindemarsh entitled *The Basis of Japanese Foreign Policy* turns out to be almost entirely a discussion of Japan's population problems, for the simple and obvious reason that Japan's whole foreign policy had for years been based upon the compelling necessity of finding some acceptable solution to her population problem. Walter B. Pitkin's *Must We Fight Japan?* published in 1921 and Warren S. Thompson's *Danger Spots in World Population* published in 1929 (which has been already referred to) both pointed out that the total demographic situation in Japan was bound to create sooner or later some kind of an upheaval. But Western politicians and statesmen with a nineteenth century outlook ignored these warnings as academic and paid the price of two World Wars in one generation. It is not too late even now to learn the lessons of these wars and do something to avert catastrophe.

Thus, the quest for land and its products has led to wars throughout man's history, if we probe deeply enough. As Professor Henry Pratt Fairchild points out, it is beyond doubt that "as long as human groups continue to increase without restraint upon a restricted area of land we may confidently expect them, in the final extremity, to fly at each other's throats for the possession of what land there is, finding a pretext in national honour or invaded rights if one is to be found, and if not, getting along without a pretext."⁵

POPULATION QUALITY AND WAR

The threat to peace is not from unchecked population growth and its pressure on resources alone. While the pressure of population on the limited resources of any country and its repercussions are important, the qualitative aspect

5. Henry Pratt Fairchild, *Versus: Reflections of a Sociologist* (New York, 1950) p. 55.

room in the world. I think it would be proof of intelligence to give it to us when it is time and with good grace, because that is truly the way to preserve peace." Italy's basic problem even today is her unrestricted population growth.

A study of the foreign policy of Japan shows, as observed earlier, that it revolved for many years directly round the problem of population. Inconsistent though it may seem, Japan encouraged population growth by all available means, much as Germany and Italy did, while demanding at the same time outlets for her surplus population. Japan maintained a kind of demographic equilibrium during all the years of her isolation by the wasteful method of high birth rates and compensatingly high death rates. The high death rate was the result of periodical civil wars along with traditional Malthusian checks. But once she gave up her isolationism and came into contact with the West, her wasteful but relatively peaceful population balance was lost, resulting in a decline of her death rate without a corresponding decline in the birth rate. The consequence was that she began to add about a million a year to her population. As the population grew on a limited island area endowed with no great resources, Japan began to look beyond her frontiers for a solution of her population problem. Westernization and modernization meant to some extent urbanization and industrialization. The consequent rise in the standard of living was promptly swallowed up by a further rise in the number of people who were only too dissatisfied with the level of living they were forced to adopt. This discontent easily became jingoistic when ultra-nationalistic, sabrerattling politicians came to power. Some solution had to be found for this population pressure and a war for colonies was just as good as any other. While the attack on Pearl Harbour in December 1941 might have been a sneaking and unexpected one, the fact that Japan decided to fight even against

rates. Those who survive do not lead active and gainfully employed lives. They merely exist on a subsistence level. And expectation of life at birth is low.

Just as weak bodies become easy prey to disease, restless and unhappy minds become susceptible to aggressive propaganda ; warped minds become fertile ground for war hysteria. An overcrowded and hungry people will follow any demagogue who promises the millenium. Such people do not question or reason why but are willing to be easily led.

"Wars begin in the minds of men", says the UNESCO preamble, but whose minds, one may ask. Certainly not the minds of happy, contented and integrated people. But as long as there is dissatisfaction and discontent, the predatory impulse to grab will persist. Even if a majority of men do not want war, they may want other things such as security, dignity and national pride. If they are convinced, as the Germans, Italians and the Japanese certainly were, that these can be had only through war, their minds are just as responsible for war as the minds of their leaders. As Bertrand Russell observes, we need in this world the kind of men who will abstain from murder and war not because they are prohibited but because their thoughts and feelings carry them away from impulses of destruction. "I do not mean that if you are good you will be happy. I mean that if you are happy you will be good." This is true of nations as well as individuals.

There is another aspect to the problem of how unchecked population growth and differential fertility affects the quality and intelligence of people. As pointed out earlier, the different national and ethnic elements of the world's population are increasing at different rates. When-

of the population is no less important. Generally, wherever the problem of numbers looms large, as in Asia, the question of quality does not even arise, for quantity is often, if not invariably, obtained at the expense of quality. Normally the qualitative improvement of a population depends on its quantitative control.

The higher the rate of population increase the lower the standard of living of the crowded peoples, as in China, India, Formosa, Mexico, Egypt, Puerto Rico, U.S.S.R., Chile and the Philippines. A lower standard of living simply means less and less of food, clothing, housing, education, health, cultural and recreational necessities and amenities for each individual. The countries which enjoy today high levels of living have naturally some of the lowest rates of natural increase. The fastest population growth is occurring in the poorest regions and the slowest growth in the richest. In fact, some areas are rich because they have controlled their population growth, while others are poor for failing to do so.

It is obvious that the quality of people in an overcrowded and hungry land cannot be high. A majority of the people in the overpopulated countries are from extremely underprivileged and blighted families. These people are usually hard put to it to eke out a miserable existence and a great many cannot afford even prime necessities such as food. Health services are not widespread and the lack of public sanitation and hygiene is striking. Educational facilities are meagre. Hunger, filth and ignorance invite disease. The impoverished bodies become less resistant and succumb to disease. And diseased bodies and sound minds do not go together, for after all, health is a state of complete well being, physical, mental and social, and not merely the absence of disease. The death rate increases and a wasteful balance is maintained through high birth and death

their basic needs and the available resources cannot be overemphasised. It is obvious that such a world population policy can only lay down general principles based on world trends in population growth, production, *per capita* income, consumption, distribution and the future prospects of these factors, considering mankind as a whole. But, unfortunately, as the world is divided into nations and communities and the apparent interests of individual nations are by no means in harmony with the interests of mankind as a whole, these general principles should therefore be applied to various countries and regions with a latitude demanded by national, regional and even local needs.

To begin with, the world needs to be educated on the prime necessity to understand the implications of population growth and dwindling resources in their sinister relation to power politics and their cumulative effect on the problem of war and peace in our time. Before any world population policy can be formulated, some effort should be directed towards creating and educating public opinion throughout the world on the positive need for an enlightened, democratic and well-defined population policy. Secondly, such a policy should be developed through public discussion of informed national and international groups aided by experts and scientists. A nation's, let alone the world's, population problem is not the concern of population experts alone, nor even that of governments alone. It is the vital and immediate concern of every thoughtful citizen in the world. No practical action can result unless the population policy that is proposed has the intelligent backing of informed world public opinion.

The formulation of a policy in any sphere of human endeavour demands an exhaustive collection and a critical survey and analysis of relevant data. A world population

ever such differential increases occur, whether as between nations and regions or as between different population elements within a single nation, they are bound to result in marked social and sometimes political effects. Besides these, there may be differentials in the increase of gifted and mediocre, "higher" and "lower" types, within a single ethnic or national group. The gifted rarely produce enough children to replace themselves, while the underprivileged in every respect have a relatively higher birth rate. Professor Cyril Burt has shown that in present-day Britain, for instance, there is a negative correlation between intelligence and fertility, and that the "lower" types have fertility of such a high rate that if it continues, the average innate intelligence of the British population will decrease quite appreciably in a single generation. This situation is perhaps true of other areas also, though we have no evidence. Without entering into the familiar controversy of nature *versus* nurture, it may be pointed out that this differential in the rates of growth between the able and the talented and ordinary, not to speak of sub-standard and mediocre segments of a population, must be of some concern to all those who are interested in raising the level of human possibilities. Despite some efforts to equalize conditions by better training and education, better working and social conditions and a more general extension of social opportunities, the cumulative effect of the multiplication of undesirable genetic qualities will have disastrous consequences in the long run. The multiplication of Jukes at the expense of Edwardses does not augur well for peace or progress.

WANTED: A WORLD POPULATION POLICY

The need for a rational world population policy based on a balance between the total population numbers and

to-day either by the governments or the universities in Asia. The situation deserves notice and calls for aid from international agencies and foundations.

While the study of population problems in all their varied aspects requires assistance and collaboration from many disciplines extending perhaps even beyond the realm of social sciences, the indispensable role of demography must be recognized. And yet, in the world as a whole, very few countries have given more than scant thought to the study of this discipline. While great strides in the study of demography have been taken in Sweden, the United States, France and the United Kingdom, and in a different way in Germany and Italy, the subject is not widely studied even in every Western country. In Asia, where the need for field study is most essential and urgent, practically no attention is given to this young discipline by either governments or universities. It is high time that Asian governments and universities became alive to this need. Nowhere is there greater raw material for study and research, experiment and demonstration in all its varied aspects than in Asia and her billion human beings. The universities must not only create chairs and impart instruction on the subject, but set up research institutes to study the dynamics of population change in different cultural milieus. No government's blue print or plan for social and economic development can be successful unless it is familiar with the knowledge of the demographic aspects of its economy. The present lack of this awareness can only postpone solutions to problems that demand immediate attention. Population experts and advisers are no less important than public health officials and defense departments in a national government.

However, no matter what the details of a regional, national or world population policy, and they are bound to

conference, preferably under the auspices of the United Nations, is a prerequisite towards this end of pooling all the available knowledge, exchange of information and views and discussion at the highest technical level. There is nothing new in this suggestion that the United Nations should summon a world population conference composed of governmental delegates, representatives of specialised agencies, non-governmental organizations and scientific bodies and individual scientists. When Dr. Julian Huxley, the British biologist, was the Director-General of UNESCO he urged the Social and Economic Council of the United Nations (ECOSOC) to follow up the valuable conference on world resources which the United Nations held in New York in 1948 by organizing a comparable conference on world population which consumes the resources. The suggestion is still being explored and it is to be hoped that such a conference will take place under the auspices of the United Nations sometime in 1953 or 1954 when most countries will have completed their latest decennial censuses. Such a conference would at least bring the problem of world population growth and global depletion of natural resources officially on to the international stage and apart from rousing public opinion, might even succeed in persuading certain obscurantist governments to take note of the pressing problem which they can ignore only at their peril.

Action towards the solution of any problem presupposes study. And nowhere is this dictum more pertinent than in population problems. An informed interest in population problems both in the government and the people is a prerequisite to effective public policy. But such an informed interest is at present absent in exactly the regions where the population problems are most acute, as in Asia and the Far East. There is a great need for study, research and teaching in all those areas but this need is not being met

birthright of every people, no matter how "backward" the colonial peoples may appear to the so-called civilized peoples.

It is unnecessary to draw here a balance sheet of British, Belgian, French or Portugese imperialism. That its political, economic, social and cultural consequences have been a mixed evil is fairly well known; nor is an analysis of these consequences necessary for our purpose. But the effects of imperialism on under-developed and undeveloped economies from the demographic point of view are important. The demographic dilemma of colonialism is this: an advanced imperialistic country usually sets up a strong and stable government and reduces the possibility of internal feuds and civil wars and prevents to a considerable extent the unwelcome attentions of other stronger neighbours. Secondly, the colonising power brings to the region modern public health services, improves public sanitation and environmental hygiene and reduces the incidence of epidemics. There is also a skeleton staff of medical *personnel* administering preventive and curative medicine. Though the total available health and medical services in relation to the needs of the colonial population are very meagre, they nevertheless effect a significant reduction in the colonial death rate. There is of course no parallel decline in the birth rate, for no alien ruling country can afford to interfere with the religious and cultural mores of the colonial population which largely account for the high fertility rates. And the result is an ever increasing population. While the level of living of the population as a whole is very low the resulting net increase of population is invariably hard put to it to eke out even a subsistence living. This difficulty is accentuated by the colonial economic policy which is based on the use of cheap and plentiful native labour to produce cheap raw materials. These raw materials are shipped to the ruling "home" country in return for manufactured

differ from region to region, or whatever be the specific recommendations of a world population conference or national population experts, they may not succeed unless the energies of the world are dedicated to the following five-pronged drive: (1) colonial freedom, (2) universal birth control, (3) planned international migration, (4) industrialization and (5) agricultural development. Population problems after all deal with people and the complex interdependence of economic, social and political aspects is nowhere more evident than in the solution of world population problems.

COLONIAL FREEDOM

That the days of imperialistic exploitation of weaker and darker peoples are over is clear beyond question, despite the unwillingness of certain Western countries to-day to part with power gracefully in parts of Asia and Africa. It is too late in the day to discuss the pros and cons of imperialism, even of the modern refined kind. If international co-operation in every sphere of human endeavour is to become effective and a world government of some kind is to be evolved eventually, the need for granting political freedom to all national units becomes imperative. Internationalism and world unity which may involve some sacrifice of national sovereignty presupposes political freedom for all nations.

It is true that while imperialism based on military might or economic domination or colour consciousness or ideological fervour still thrives in parts of the world, its character as one of pure and unmixed exploitation of one people by another is gradually becoming a thing of the past. And most intelligent students of world affairs concede to-day that no nation is good enough to rule over another and that political freedom and national self-determination are the

"native" initiative and action on account of frustration. Thus colonial unrest is the product of hunger and poverty, high disease and high birth rates. They constitute one big vicious circle. As Dr. de Castro points out, the world's great areas of endemic hunger are exactly the colonial areas. Whether they are economic colonies or political colonies it is the same. "Without a basic change in colonial policy, which would permit the colonial peoples to produce on a scale sufficient to satisfy their biological needs, there is no use hoping for a radical solution to the problem of universal hunger. Colonial peoples will go hungry just so long as they dedicate their best efforts to producing raw materials for export, because the play of world economic forces always tends to reduce the value of their labour in the interests of industrial profits."⁶

Though countries such as France, Belgium and Portugal may not realise it, nationalism has come to stay in Asia and Africa and political freedom for all peoples can no longer be delayed. The myth of Western military and social invulnerability has been exploded and the day of Western domination is over. Even the fear of Communist infiltration in the event of political freedom cannot stem the tide of nationalist self-assertion. In the future, the struggle may not necessarily be between the rulers and the ruled, for other nations will perforce take sides; a struggle in some corner of the world is bound to have political and economic repercussions all over the world even if the actual fighting is localised. The sooner this state of affairs is ended the better will be the prospects for world peace. The question to-day is not whether the colonies should be given freedom or not, but whether the colonial powers will divest them-

6. Josue de Castro, *Geography of Hunger* (London, 1952) p. 253.

commodities which are dumped on the colonial market with the aid of preferential tariffs. This economic pattern is naturally opposed to any effort at materially raising the standard of living of the colonial population by urbanization and industrialization. Thus the colony's raw materials go to the ruling country, whose nationals appropriate all the fat jobs thus leaving the colony in a state of overpopulation and arrested economic and social development. Such a colonial policy as this means not only poverty and hunger on the one hand, and frustration and delay of the legitimate aspirations of more than two hundred million people on the other, but also an incitement to international tensions and possibly a third World War.

Colonial administrations, by their very nature, are not interested in developing the areas under their control for the benefit of the colonial populations. The colonial budgets, without an exception, devote a lion's share of the income of the country to costly (foreign) administration, defense, law enforcement, police and jails which constitute the coercive instruments of a country's administration. And a very small amount is spent on nation-building activities and services like education, health, social reform and agriculture. This discredited pattern of expenditure becomes necessary because the alien government rules the colonial population with a certain amount of force, and not by consent as an elected popular national government does. Since the safety of the rulers is naturally important, the activities of every patriot are dubbed seditious and subversive with the result that a large police force and spacious jails become necessary. Social reform or women's education cannot be sponsored by the government because even good intentions from an alien government are suspect. Colonialism on the whole not only does not improve matters on its own, but actually prevents

than a momentary period. Birth control knowledge must become the birth-right of every wife and mother so that she can plan and regulate the size of her family for health, economic and other reasons. Babies by choice and not by chance must be enshrined as one of mankind's fundamental freedoms.

The arguments for and against birth control have been advanced *ad nauseam* and they need not be repeated here. Great minds have debated this question threadbare and have given a verdict in its favour; so has been the scientific verdict as well. Not even the imponderable but impenetrable ideological barriers of Rome and Moscow have been able to prevent the knowledge and practice of contraception permeating almost every stratum of life in the Western world. The question now, therefore, is not whether we should have birth control or not, but how to make it an integral part of the mores of every culture.

Birth control has come to stay in the West. It is now the business of all enlightened men to spread it in Asia, Africa and Latin America. There are both aids and difficulties in this programme. In most Western countries, including the United Kingdom and the United States, there have been severe battles—legal, social and moral—to make birth control acceptable and accessible to those who need it. Fortunately, in most Asian countries to-day there is no Government hindrance and the birth control crusader has no legal or political battles to win. But there are many material difficulties. To begin with, the standard of living is incredibly low. Birth control is usually associated with a high standard of living. That is, once the people come to enjoy a high standard of living, they become reluctant to give it up and hence voluntarily restrict the size of the family to escape the inevitable logic of reduced rations. But we can-

selves of power with grace, or whether they will be thrown out with the aid of war and revolution. A great responsibility rests here not only with the imperialistic countries which have to part with power sooner or later, but particularly with countries such as India which have recently regained their lost political freedom and which can appreciate the need for championing the cause of the colonial countries. And even where political freedom cannot be granted immediately, as in the case of some United Nations Trust territories, the United Nations and the colonial powers must explore every means to raise the standard of living of the colonial populations. Such efforts are bound to fail unless the governments introduce measures to control the fertility of the colonial population. The present colonial policy of non-interference with the social economy and indigenous cultural mores in the narrow sense must be ended, for unrestricted population growth and a rising standard of living are incompatible. Such interferences need not necessarily be misunderstood by the colonial people if they are satisfied with the colonial powers' genuine interest in their welfare and their readiness, if not anxiety, to transfer political power at the earliest possible moment. This is a major requisite in any rational world population policy which aims at eradicating international tensions and mass want.

UNIVERSAL BIRTH CONTROL

No rational world population policy can be complete or effective without universal knowledge of and facilities for the practice of contraception. While this knowledge must be immediately made available to all the backward, underdeveloped and overpopulated countries, it should not be denied even in countries which are sparsely populated, countries where population has become stationary and where population has even registered a declining trend for more

or clinics. And where such meagre facilities may be available there are distressing and difficult problems of poverty, illiteracy, ill health and inertia. While these may be the general difficulties, the special requirements may vary from community to community. Social and moral attitudes, religious beliefs, family structure, pattern of sexual behaviour, domestic conveniences and other factors are bound to influence the average woman's readiness for or resistance to contraception. And it must be confessed that much is not known about these factors for all the various ethnic groups and nationalities in the overcrowded areas of the world.

A clinical examination, a contraceptive and the ability and willingness to resort to it may be centuries away from a hovel in India, a sampan in China, a rural hut in Japan or Burma. We need a cheap, acceptable, simple and effective contraceptive. This means research and money; and one cannot conceive of a greater or a better investment than this in the cause of world peace and prosperity. As William Vogt rightly points out, "If the United States had spent two billion dollars developing such a contraceptive instead of the atom bomb it would have contributed to our national security, while, at the same time, it promoted a rising living standard for the entire world. If such an amount is required to develop a satisfactory contraceptive it will be a sound investment." It would be infinitely wiser to prevent unwanted "immigration from heaven" than to kill them off in over-populated countries with an atom bomb.

Fortunately, even in the overpopulated and under-developed countries there are some — a small minority no doubt — who are convinced of the supreme need to restrict

7. William Vogt, *Road to Survival* (New York, 1948) p. 280.

not wait to introduce birth control until the standard of living has been raised because population growth and a rising standard of living do not go together. Thus the dilemma before the billion backward people in Asia is that whereas birth control is needed to check the threatened decline in the already poor living standard, successful practice of present day birth control methods requires a far higher general living standard than is found in Asia. The way out of this vicious circle is of course to have birth control form a part of an overall programme of world economic development and population control.

Secondly, this movement must start with the villages, where a majority of the overpopulated nations in Asia live. They are the base of the socio-economic structure. The fact that there are some birth control clinics in a few large cities catering to the needs of the upper classes is more a problem than a solution, for it only aggravates the implications of our rural-urban and class differential fertilities. Just as it is between nations, so within nations also it is the poor end of the socio-economic ladder that is multiplying fast to-day. This, as already pointed out, affects the quality of the population. The families (and nations) who are most handicapped in economic resources, health and education are those least equipped for the rearing of the nation's (and the world's) citizenry. Yet it is these very underprivileged who have at present the major burden of caring for and rearing more than their proportion of the next generation.

But taking the message of birth control to the rural millions is more easily said than done. As it is, the villages of Asia are starved for medical and health facilities. In millions of rural homes there is no running water, bathrooms or privacy; they are far removed from dispensaries

bution towards lessening want and the possibility of war. But when she notes that a neighbouring nation is outbreeding her, she becomes alarmed and apprehensive and will insist on multiplying faster than her neighbour. Thus a fertility competition begins. A population race between nations is much the same as an armaments race. What we need therefore is not only a disarmament of conventional weapons but also demographic disarmament. Perhaps, just as a Disarmament Conference fixes the ratio of armaments that various nations can possess, maximum population numbers of various countries in relation to their resources may be fixed.

PLANNED INTERNATIONAL MIGRATION

Any world population policy that is to be acceptable to more than a billion people in the backward and undeveloped areas should aim to rectify and remove the unhappy consequences of historical and political accidents involving inequalities of world population distribution in terms of land area and other resources. During the last one hundred and fifty years, millions of people, mostly from privileged Western nations, have moved from their former homes to new locations, most of them from Europe to the Americas and the Lands Down Under. This has only increased the difficulties of the underprivileged countries in Southern and Eastern Asia. This nineteenth century migration has widened the existing imbalances of population to the whole set of economic opportunities. The subsequent pattern of immigration legislation of various nations has further aggravated "the differential pressures of people on their resources."

We find that as the world becomes increasingly interdependent the barriers between one country and another

their national birth rates in the interests of national health, economic security, peace and prosperity. The hands of such individuals must be strengthened. Once the people of these areas are awakened to the realization that there is a workable remedy for their desperate needs, no government, however obscurantist it may be, can resist providing birth control knowledge for the people.

Further, wherever population pressure is to be granted relief through substantial emigration possibilities, the practice of contraception in the home population as well as among the emigrants must be made effective if not compulsory. This step is imperative, for otherwise the role of emigration as a solution to population pressure loses its force. It has been pointed out in an earlier chapter that while rapid and largescale emigration could afford relief to overpopulated countries, such relief is bound to be temporary unless the resources of the sending country were considerably increased or its birth rate drastically curtailed. Otherwise the wasteful demographic balance of high birth rates and high death rates will be re-established in the home country when the relief afforded by emigration is negated by a high birth rate. What is worse, without birth control the emigrants will simply transfer their old wasteful demographic processes to the new country. It appears therefore that without birth control the condition of overpopulation will persist as a standing invitation to international tension and aggression. Bertrand Russell goes to the extent of saying, "while great wars cannot be avoided until there is a world government, a world government cannot be stable until every important country has a nearly stationary population." There is only one workable way to achieve this condition.

And last a nation may agree to the adoption of a programme of "universal" limitation of population as a contri-

pressure and international friction his contention that world migration is possible and that it is a problem to be solved by international statesmanship must be endorsed. The present task, therefore, is to create an International Migration Authority which would bring the concerned countries together and draw up a plan to effect peaceful population transfers.

Such an International Migration Authority can outline and carry out the accepted provisions pertaining to migration as an integral part of a world population policy. This Authority may best work under the auspices of the United Nations, despite the present limitations of the United Nations Organization. Perhaps the International Migration Authority could become a specialized agency of the United Nations like the ILO, WHO, FAO, UNESCO etc., with a similar constitution and set-up. Such an International Authority, to begin with, has to be a voluntary and co-operative organization composed of such national governments as are interested in the problem of world migration and particularly of countries which are prepared to permit their people to emigrate and (which are prepared to) receive immigrants. Countries which have neither people to "export" nor space to spare can also be members and help, financially and otherwise.

The initial difficulties in the functioning of an organization of this kind may be many. In fact, the primary difficulty may be that countries with population problems of one kind or another may not be willing to enter the organization, particularly countries which are likely to be asked to receive immigrants not to their liking. Russia, which has totally banned emigration and has raised rigid barriers against newcomers may not join the organization. Australia and Canada may also stand out. But a progres-

are raised higher and made stronger. In fact, in the past when the world was a place of immense geographical dimensions and when communication and travel were difficult migration was freer than at present. The more close-knit the world becomes economically, the more suspicious and distrustful are nations of one another. From the point of view of the movement of individuals from one country to another, the United Nations and the One World of our dreams are literally poles apart. Freedom to migrate even in a limited sense is yet to be recognized as one of the fundamental freedoms.

That there is a tremendous migration potential, particularly in Asia, and that there are many areas in Africa, Latin America and the Pacific Islands in need of workers need not be dilated upon. Professor Carr-Saunders wrote in 1931, "There are vast areas which are relatively underdeveloped which could (that is to say) support much larger numbers without overpopulation. There is a good case for holding that these areas should be made to bear their fruits. The rest of the world will not tolerate indefinitely the failure to use them fully in the common interest. It is therefore possible to be sceptical about the restlessness of overpopulated countries on account of their exclusion from these regions, and at the same time to allow that there is a claim in justice for the palliation of their condition by creating appropriate facilities for emigration. Population pressure thus appears as a problem for international statesmanship not because it is a prominent cause of international friction but because there are countries which need development and there are peoples with a surplus population apparently available for this purpose."⁸ While one may not agree on the negative relation between population

8. As quoted in F. C. Wright, *Population and Peace* (Paris, 1939).

planned migration within the Commonwealth, has three objectives: (1) to bring about large-scale organized voluntary migration of people and industry from Great Britain to the European-settled countries of the Commonwealth overseas, (2) to encourage the inclusion of continental Europeans where immigration opportunities favour their entry, and (3) to make migration an issue of the highest priority in the life of the Commonwealth. The Council emphasizes the economic unbalance and weakness in the concentration of more than 50 million people and the bulk of the industrial power of the Commonwealth in the 94,000 square miles of the United Kingdom, while vast natural resources in European-settled overseas territories remain untouched for need of manpower and equipment. The main problems stressed are the provision of transport, housing, finance and raw materials, as well as securing the agreement of workers to migrate. The Migration Council is urging a conference of Commonwealth Prime Ministers to discuss the problem and for the creation of a permanent British Commonwealth Migration and Development Organization representative of all the Governments of the Commonwealth and of their industries and workers.⁹ Here again the projects are limited to the British and the Europeans and the European-settled areas of the Commonwealth. The non-European populations as well as non-white areas do not enter the picture.

There are a few non-governmental organizations such as the Jewish Agency interested in the promotion of international migration but their aims are different and they are restricted to sectional, religious or national groups. Perhaps an International Migration Authority as envisaged here may coordinate the activities of all the existing organizations

9. *New Commonwealth* (London) Dec 1951.

sive world public opinion may be able to persuade even these countries to co-operate with migration plans. There is of course a better alternative—a world government; and if it ever comes into being it may be able to accomplish this task. There is a worse alternative, that of war and revolution which may force some nations to think lightly of the sanctity of national frontiers.

It is unnecessary for our purpose here to go into details about the schemes or the *modus operandi* of the organization. But it may be pointed out that any international migration sponsored by the International Migration Authority must be based on conscious planning of every detail affecting the migrants. It should not be a *laissez faire* movement as in the past with all its heartaches, uncertainties, denials and discriminations. "It should be conducted with less heedlessness of human needs and should give rise to fewer tragedies." The major aim of such planned international migration should be not only to bring the distribution of population into consonance with the distribution of resources between nations, but also to build happy, prosperous and integrated communities which would not feel the urge to wage wars.

Something in this direction is already being done by the Permanent Migration Committee of the International Labour Office and the International Refugee Organization. But these are concerned largely with Europe's displaced persons and refugees respectively. The Asian peoples, who are in dire need of emigration relief, have been ignored completely. An extension of the present work on a global scale might effect a more rational distribution of population.

Recently, in April, 1950, a Migration Council was founded in Great Britain. The Council, which pleads for

jects will be formidable, points out, "The financing of migration must be considered as a part of general economic development and revival of international trade. If a country is carrying out development schemes and if these schemes require immigration of labour for their execution the necessary additional capital for such migration might naturally be provided within the framework of the general expenditure on the development project, whether the sources for this expenditure are national or foreign investment."¹⁰

Several factors such as the distance, the nature of transportation, the kind of occupation into which immigrants enter, the nature and extent of social services provided for the immigrants and the number of dependents per adult worker have to be reckoned with in estimating the cost. Perhaps when large groups of families are settled the cost per individual may be less. But while initial costs may be forbidding, the long-run returns in human happiness and production may outweigh the costs. More important, no matter what the cost of any international movement of people, it is bound to be insignificant in terms of the cost of modern warfare. While expenditure involved in human settlement and rehabilitation yields some tangible and invisible returns the huge sums expended in war give nothing in return, save "blood, sweat and tears". According to one estimate, it cost Julius Ceasar 75 cents to kill a man. For Napoleon the cost was \$3000. Modern atomic warfare has raised the figure tremendously. For the Second World War it has been estimated at \$50,000 per dead soldier.¹¹ When the cost of the dead and the casualties, together with

10. *Forms of International Cooperation in the Field of Migration* (Geneva, I.L.O. Permanent Migration Committee, 1946) Mimeographed

11. Lowell M. Limpus, *Twentieth Century Warfare*, (New York, 1949) p. 134.

interested in this question. That there are and will be a great many difficulties cannot be denied. No country, in the present international context, will easily or willingly give up its right to determine the composition of its population or the right to frame its own policies of immigration and emigration. To-day, the national parliaments of the various countries decide who shall enter and who shall leave. But this power must eventually vest in the International Migration Authority of the United Nations or some such organization. The International Migration Authority may have to respect national sovereignty to begin with perhaps, but even then, only within certain reasonable limits. Whenever a nation's policy is found to be at variance with the larger interests of mankind as a whole, some machinery to effect a peaceful change must be devised.

Apart from colour bar, religious bigotry, cultural assimilation and national immigration policies, the formidable cost of any worthwhile international migration project may hold it up. The transportation and resettlement of migrants will be decidedly expensive. If emigrants are not to be transported in fetid steerage passage and left to fend for themselves on landing without any monetary aid or social services. To give a few random examples of the cost involved: in 1928 the cost of recruiting one Javanese labourer to East Sumatra was 125 guilders. In 1937 the cost of settling one Javanese family from Java to Sumatra was about 300 guilders. In 1937 the cost of settling one European in Australia was as high as \$26,470 per settler, while another scheme in Australia cost \$42,000 per settler. The IRO schemes and the settlement of Jews in Israel work out at a figure considerably less than these per individual immigrant. The transportation of Indian and Chinese labourers in South East Asia is not so costly. The International Labour Office while admitting that the cost of large scale migration pro-

Here is a case for foreign assistance. There should be no difficulty in any government accepting foreign capital so long as it is offered without any political or other strings. Foreign capital itself will not be shy if conditions of investment are made attractive and guarantees given against expropriation. Apart from private foreign capital, the resources of the World Monetary Fund and the International Bank for Reconstruction and Development are fortunately available to-day.

The weakest link in the chain is the want of technological know-how and managerial ability. The overpopulated Asian countries are sadly deficient in both of these. If latest modern machinery and appliances are included in this, the deficiency is more striking. Here again there is the Plan for Technical Assistance under Truman's Point Four Program. What is needed is an intense "two-way" traffic between Asia and the West. While Asian students get training abroad, Western technologists must visit Asia and train personnel in their own countries. While both types of schemes are necessary, the latter may be cheaper and the problems of industries in Asia can be tackled on the spot. Thus, when raw materials, men and machines are brought together commodities and services will begin to flow and an economy of artificial scarcity can be transformed to one of relative abundance.

Some have expressed concern over the possible future relations between a greatly industrialized and populated Asia and the West. It is unnecessary to go into the economic consequences of a world whose nations have become industrialized to their maximum capacities. There is no great danger of an industrialized Asia competing with Europe for colonies or markets. Asia need not seek markets beyond its frontiers. The irreducible minimum require-

the cost involved in the destruction of non-renewable resources is computed the staggering cost of modern war becomes obvious. In contrast to this, the cost of any international scheme of settlement and rehabilitation of underprivileged people would be a trifle.

INDUSTRIALIZATION

Fourthly, industrialization of these countries must be considered as an imperative task. Large-scale and rapid industrialization of all the over-populated economies may be a way out of the present dilemma. This policy can be carried out wherever the basic requisities of industrialization are available, at least potentially, in adequate measure. These are raw materials, labour, capital resources, technological know-how and a market. The most important prerequisite is of course political freedom. Political dependence and economic progress based on a policy of industrialization do not go together for obvious reasons. Most of the national units in Asia and the continent as a whole have the necessary raw materials. A more thorough geological survey might unearth more resources. These resources have been exploited during the last two or three centuries by foreigners and the dividends have flowed back to where the capital and technological skill came from. Asia has cheap and plentiful labour. Most of the labour is unskilled as it is recruited from the countryside and consequently has an agricultural background. But India and Japan have shown that these erstwhile peasants can be taught to tend modern machines. Once their nutrition, health and housing are taken care of, they prove to be as good industrial workers as those of any other country. But unfortunately they are forced into wretched urban slums which are worse than their rural hovels. As for capital, indigenous resources may not be adequate to finance largescale industrial projects.

education and the emancipation of women will be pre-requisites of such a social change.

From the demographic point of view, a programme of industrialization will face two major difficulties at the initial stage. These difficulties may even aggravate the population problem at the start. First, when a crowded region is mechanised, machines replace men and the numbers of unemployed begin to swell. Human beings cease to be a "resource" and become a liability. Secondly, the total population may begin to increase. This is the preliminary result of the first stage of industrialization. This is so because better incomes provide better food. This in turn not only reduces the death rate but also increases the marriage and birth rates for at least a temporary period. However, when the standard of living increases and when the affected population appreciates the need for retaining the increased standard of living, the birth rate is controlled and the population growth begins to level off. Industrialization thus involves an increase in the family's income and urbanization. The resulting higher standard of living in an urban environment seems to encourage birth control. In course of time, birth rates, like the death rates, will begin to fall. In the more advanced Western countries, the population has been growing slowly as a result of this process. Before the second World War Japan was in the midst of this process. There is no reason why such over-crowded countries like India and China should not eventually travel the same road.

AGRICULTURAL DEVELOPMENT

Yet another factor is worldwide agricultural development. No matter what is done by way of industrialization, the areas under discussion are bound to remain primarily agricultural for a long time to come. While industrialization

ments of civilized existence of Asia's billion people in terms of food, clothing, shelter, education and health constitute the world's biggest market. There is such a tremendous pent up demand that a century of industrialization may be necessary to satisfy it once the Asians' purchasing power is raised. So Asia need not wage wars to capture markets abroad. It will take decades before she can meet the needs of a billion customers within her own continental frontiers.

Of course, industrialization is not an overnight process. The task of transferring surplus millions from overcrowded land into productive urban factories is more easily advocated than carried out even when the necessary favourable conditions have been created. The overpopulated countries in Asia are primarily agricultural and it will take decades to change the present occupational distribution of the population, to the extent of reducing those that are gainfully dependent on the land by some ten per cent. Industrialization is a longterm solution.

Apart from the necessary economic factors, what is needed is a mental revolution and a will to change. This involves a realization of the dignity of man, a realization that will compel the society, at the most elementary level, to use a wheelbarrow instead of a human head to carry a load. Nor can the social obstacles to industrialization be minimised. In agrarian society it is difficult to break the cake of custom, and all change is suspect. The industrialization and transformation of an Eastern society on western lines will demand almost a social revolution affecting the entire cultural milieu. There are many obstacles in the path of such a revolution, the chief of which are mass illiteracy and women's low social status which makes prolific childbearing their chief current occupation. Widespread

does. If the yield per acre in these countries is taken to be representative of the average fertility of the land in these three countries, the differences in output become all the more striking, as there are no significant institutional or technological differences in farming practices between India, China and Japan. The problem is to make an acre in India yield, to begin with, as much as an acre in Japan and eventually to make the acre in India as well as in Japan yield as much as an acre in the United States, Canada, Argentina or Australia.

Even in advanced countries such as the United States of America, the last word on agricultural development has not yet been said. Recently, Charles E. Kellogg of the United States Department of Agriculture, declared that the yield per acre in the United States could be considerably increased. Though all are accustomed to look upon American agriculture as very advanced, yet, according to Mr. Kellogg, his countrymen are not yet making full use of the materials and techniques readily available to them, such as improved machinery, fertilizers, better seed varieties, etc. How the adoption of hybrid corn has increased the yield per acre in the American corn belt by as much as a fifth is well known. If this can be done on land where farm yields are already high, it should be possible to do at least as well in other regions capable of development but where the present yield is low.

No discussion of the problems to be solved or reforms to be carried out to raise the yield in undeveloped countries is necessary. This is an old story and a mere list of the difficulties and obstacles will suffice. These problems center round the cultivator, the land, and the cultivator's relation to the land and other factors.

is necessary and important, immediate relief and returns can be had only through an agricultural revolution introducing the latest scientific agricultural practices wherever crops are raised and bringing all available land all over the world under cultivation.

It is unnecessary to review the present state of world agriculture particularly with reference to overpopulated agrarian economies beyond pointing out that near-starvation, high birth rates and overcrowding, filth and squalor, high morbidity and death rates, soil erosion and economic exploitation by either the state or landlord constitute the familiar pattern of agricultural life. There is nothing as a standard of living in the accepted sense of the term. Incredible poverty is the only standard. And this miserable existence, unbusinesslike and uneconomic, has become a way of life. This is the lot of nearly seventy per cent of Asia's population who depend on the land for a living and it is true as well of farmers in Africa and Latin America.

To achieve anything approaching a decent standard will demand a tremendous international effort directed simultaneously on numerous fronts. And all efforts at agricultural development can be grouped under two categories: (1) those that contribute towards an increase in yield and (2) those that help to bring new land under cultivation.

The yield per acre as well as the yield per capita differ from country to country and between regions within a country. The differences in yield per acre or per capita between say the United States of America and India are impressive but understandable in view of the tremendous cultural and technological differences between these two countries. But there are some impressive differences in Asia as well. China, for example, produces twice as much on an acre as India does. And Japan raises twice as much as China

pests, fewer but better livestock, rural credit facilities and consolidation of holdings. But nothing substantial has been done. There is the Food and Agriculture Organization of the United Nations, which is rendering some limited service in the field of its specialization. But the privileged world either lacks the necessary resources, what with armament and military demands, or simply does not care. If someday the world is awakened to the need for these reforms, production can be tremendously increased without any corresponding increase in the land under cultivation; hunger can be banished and the depressed and downtrodden peasants of the world can be rehabilitated into a vital, living human force on the side of peace and progress.

The second major problem is to bring all the available arable land under cultivation. This is both a national and an international problem. To-day only about 8 to 10 per cent of the total world area is cultivated. Barring some deserts, perpetual snow and ice, tundra and rugged mountains, there are enormous stretches of land that can be brought under cultivation. The only snag is that of the cost. Of course, the world's uncultivated areas are generally less fertile than those already under cultivation. But this is not true of some areas in Africa, Latin America and Pacific-Asia, where native inhabitants have not had a long tradition of agricultural occupation. Even if these lands are not of a very high quality they can be made to yield with the aid of modern fertilizers and techniques.

But there are many problems in the path of bringing these areas under the plough. In some countries, the agrarian population cannot afford to do so for lack of finance to buy tools and other equipment. The knowledge necessary to tackle these reforms may be lacking. Secondly, in some regions, the lands are under the sovereignty, ownership or

The picture of the cultivator in Asia and other under-developed areas has been drawn only too often. He is incredibly poor and his poverty is both a cause and a consequence of his station in life. He is illiterate and suffers from ill health. He lives in a squalid hut devoid of sanitation and hygiene. His food, when he can get it, is coarse and least nutritious. He is in perpetual debt, either to the state, or to the landlord or moneylender. The demands made on him by his social and religious obligations accentuate his misery.

Secondly, the land he cultivates is in almost a similar plight. Through the years it has been fragmented and subdivided into numerous uneconomic patches. The land has been cultivated for centuries in such a primitive fashion that it has lost much of its inherent fertility. It has been giving for centuries without receiving anything in return. Whether there is a drought or a deluge it is the land which suffers. There is the problem of erosion. There is usually no crop-rotation. There are no fertilizers, natural or artificial.

Thirdly, the relation between the cultivator and his land, animals, and human society—the whole ecological set-up—does not brighten the picture. The types of land tenure range from agrarian slavery and share-cropping to peasant proprietorship. Landless tenancy seems to be the lot of a majority of the world's cultivators. There are problems of rural credit to cover not only seeds, manure, fertilizer, ploughs, cattle and fodder but marriages and funerals as well.

These are some of the problems and the necessary solutions and reforms are well known. These problems can be solved by a concerted attack with the aid of soil conservation, afforestation, irrigation, better implements, better seeds, the use of organic and inorganic fertilizers, better control of

increase in population result in high levels of living? The rise in levels of living in Western Europe was not a result of the agricultural revolution alone. There were emigration outlets and the beginnings of industrialization. Therefore, Asia cannot hope to raise her level of living by merely increasing agricultural production, for the increase in population would swallow up the additional production without changing the existing subsistence level of living.

What is needed in Asia is to make every woman deliver one baby where she delivered two or more before and make two blades of grass grow where one grew before. Population restriction as well as increase in agricultural production accompanied by emigration and industrialization can achieve high levels of living.

CONCLUSION

While the title of this study seems to emphasize emigration, it is only as a part of a wider programme of birth control, industrialization and agricultural development. The problem of world population growth and pressure is so formidable that no simple solution will suffice. Any effective and worthwhile results, at least in Asia and other underdeveloped regions, will require sustained and simultaneous attack on all these fronts. In fact, all these approaches are interdependent and it is difficult to isolate the importance of any particular approach. What is really needed is a policy of overall economic development of the concerned areas, for in the final analysis, a population policy is bound to be primarily an economic policy, without necessarily minimising the importance of non-economic factors.

The price that the world will have to pay for this global economic development will be high. But whatever the cost, it will be equivalent to the price of peace. There is no doubt

domination of white rulers who cannot cultivate them for reasons discussed elsewhere in this book. Nor will they allow others—Asians—to emigrate, settle and develop these lands. It is this criminal dog-in-the-manger policy that is keeping millions of acres from bearing fruit. The white rulers would rather go to war in defence of their ill-gotten empire than let peaceful peasants from a neighbouring country work the land and help to feed the world. What then is the way out? A third World War or a peaceful change in the *status quo*. The wisdom of the world's statesmen is on trial.

The initial demographic result of any sustained technological change in agriculture in Asia may be the same as the demographic consequences of industrialization—namely, a spurt in the growth of population. When per capita yield and total production increase, the population, which has been till then living on a subsistence level, is bound to grow. According to the Malthusian view, the population is bound to grow to the limits of subsistence till various checks restrain its further growth. But here again, as in a policy of industrialization, there is some hope of an eventual rise in levels of living and stabilization in the population growth. Revolutionary changes in agricultural technique in Western Europe during the last century led, it is true, to a great growth of population, but it was also accompanied by rising levels of living. Perhaps in Asia great technological changes in agriculture may lead to a further addition to population, but she may also witness a rise in the level of living. While there is no reason why the nineteenth century Western European experience of this kind cannot be repeated in Asia, it is doubtful whether, even with an agricultural revolution, the Asian picture of "too many people, too little land" can be transformed into one of "many people but high level of living." How can increased production accompanied by an

from hunger they would also escape from the oppression of fear which often leads to aggressive attitudes. Once the living conditions of these millions of people are improved, the economic security and prosperity of the whole world can be assured. The tremendous task of achieving this end rests squarely on America and Western Europe. "Even if no motive were involved except self-preservation", pleads Bertrand Russell, "it would be urgently necessary for the West to find ways of raising Asia and Africa to the economic level of Western Europe, if not of America. So long as this is not done, Asia and Africa will inevitably feel envy, and the envy will turn to destructiveness. While destructive passions dominate half the human race, the other half cannot be safe. Europe and America therefore, even if very considerable sacrifices are involved, will if they are wise, devote themselves to the economic welfare of populations that are not white."¹²

If we wish to avoid a third World War then we must revolutionize our social thinking. The world can never progress half free and strong, half slave and starving. Wars have been fought for many ends, to save democracy and to end all wars. But none of these wars have achieved any of the avowed objectives; they have created more problems than they solved. Modern war inflicts defeat on victor and vanquished alike. Destruction and disease, famine and fear are the real victors. And yet, it is said that after every war the victors adopt the vices of the vanquished. Let it not be said of this generation that when it took some action it was "too little and too late". Let us falsify the cynical saying that "the only lesson we learn from history is that mankind has never learnt from history."

12. Bertrand Russell, *New Hopes for a Changing World* (London, 1951) p. 143.

that there is a widespread desire among all peoples, including the Americans, Russians and Chinese, for peace, as well as an abhorrence of violent methods of solving disputes between nations. There is also a universal conviction that no matter what the price of peace, it is bound to be incomparably less costly than a third World War—the loss of life, the suffering and the pain, the destruction of property worth billions and, above all, the check to human progress.

The fact that the world has shrunk from its once immense dimensions to an interdependent and accessible unit is repeated *ad nauseam* but the corollary thought and action befitting a small neighbourly world have not yet become evident. The awareness that no nation or group of nations can escape the duty and obligations of international solidarity in the interests of common welfare has not yet permeated the daily thinking of the men who rule the world. The major obstacle to the realization of this awareness seems to be the sacrifice that is involved. The sacrifice is apparently difficult, for it may involve the loss of a little of a nation's sovereignty or income, or its cherished myths and dogmas about the superiority of its peoples. Sometimes, the sacrifice demanded of a nation in the interests of world peace might appear to undermine the very foundations on which the national state rests. But if lasting peace is to be successfully won no sacrifice should be considered too high, just as in times of war no sacrifice is counted too great for victory.

Just as aggression anywhere in the world is a threat to peace everywhere in the world, so poverty anywhere is a threat to prosperity everywhere. Nor can we afford anymore to have hungry mouths begging for food in one part of the world and agricultural surpluses begging for markets in another. Peace and social justice are one and indivisible. When economic and social opportunities are equalised millions of people can be freed from hunger. With freedom

APPENDIX A

THE RACE QUESTION *

The importance which the problem of race has acquired in the modern world scarcely needs to be pointed out. Mankind will not soon forget the injustices and crimes which give such tragic overtones to the word "race". It was inevitable that Unesco should take a position in a controversy so closely linked not only with its goals but also with its very nature. For, like war, the problem of race which directly affects millions of human lives and causes countless conflicts has its roots "in the minds of men". The preamble of Unesco's Constitution, adopted in 1945, specifically named racism as one of the social evils which the new Organization was called upon to combat. Moreover, the Constitution declares that "the great and terrible war which has now ended was a war made possible by the denial of the democratic principles of the dignity, equality, and mutual respect of men, and by the propagation, in their place, through ignorance and prejudice, of the doctrine of the inequality of men and races".

The vigorous action which Unesco is about to undertake in support of the struggle against race prejudice was evolved in response to a resolution adopted by the United Nations Social and Economic Council at its sixth session in 1948. By that resolution Unesco was called upon to consider the timeliness "of proposing and recommending the general adoption of a programme of dissemination of scientific facts designed to bring about the disappearance of that which is commonly called race prejudice".

The General Conference of Unesco in 1949 adopted three resolutions which committed the Organization "to study and collect scientific materials concerning questions of race", "to give wide diffusion to the scientific material collected", and "to prepare an educational campaign based on this information".

There is great confusion on the notion of race, so great that no campaign designed to remove prejudices can be effectively undertaken without careful preparation. Such groundwork must include a clarification of the present scientific position in the controversy on the subject; indeed, it must first of all provide a definition of race on which the different scientific circles concerned can agree.

It was with this in view that Unesco invited a number of anthropologists and sociologists from various countries to meet as a committee of experts in Unesco House in December 1949. They discussed all aspects of the problem at great length and finally drew up a declaration, the text of which is presented further on. Every word of this declaration was carefully weighed. Nothing was neglected in the effort to present to the public in a simple and clear manner the conclusions which science has reached on the subject.

* *Unesco and its Programme*, (Unesco House, Avenue Kleber, Paris, 1950).

defined human group over other equally arbitrarily defined groups. Instead of being based on scientific facts, it is generally maintained in defiance of the scientific method. As an ideology and feeling, racism is by its nature aggressive. It threatens the essential moral values by satisfying the taste for domination and by exalting the contempt for man. Concern for human dignity demands that all citizens be equal before the law, and that they share equally in the advantages assured them by law, no matter what their physical or intellectual differences may be. The law sees in each person only a human being who has the right to the same consideration and to equal respect. The conscience of all mankind demands that this be true for all the peoples of the earth. It matters little, therefore, whether the diversity of men's gifts be the result of biological or of cultural factors.

Thus, the problem of race must be approached not only on the biological and social levels but also on the moral level. And, in view of the growing inter-relation of the sciences affecting man and society, it can be solved only by the joint action of different scientific disciplines. Unesco will undertake to make known to a vast public the results of the researches obtained in all these various fields. It will, for example, publish pamphlets prepared by eminent specialists.

Many inquiries have already been undertaken into interracial conflicts and the factors that produce them. The time has now come for us to consider the societies which have in large measure succeeded in resolving antagonisms by overriding racial differences. Thus, the General Conference of Unesco in Florence recommended for the 1951 programme of the Organization a study of racial relations in Brazil. This great republic has a civilization which has been developed by the direct contributions of different races. And it suffers less than other nations from the effects of those prejudices which are at the root of so many vexatious and cruel measures in countries of similar ethnic composition. We are as yet ill-informed about the factors which brought about such a favourable and, in many ways, exemplary situation. But in the present state of the social sciences, general speculations no longer suffice. We must have specialists make searching inquiries in the field. We must learn from them exactly why and how social, psychological and economic factors have contributed in varying degrees to make possible the harmony which exists in Brazil. Then the results of their inquiries can be set forth in publications in order to stimulate those who are still struggling elsewhere to introduce more peaceable and happier inter-racial relations.

Yet, no matter how great an effort Unesco may make in this field, it cannot by itself bring to an end the most tenacious and the most widely spread of human prejudices. It must be able to count on the support of groups and organizations formed in many countries to achieve the same purpose. To these fighters, indeed to all those who rebel against the idea that millions of human beings are condemned by the mere fact of their birth to humiliation and misery, Unesco brings its co-operation. It brings too the hope that the struggle against the misdeeds of racism will become a crusade to be carried out in common by all the peoples of the earth.

Nor was the declaration in the form decided upon in Paris the end of the effort to make the statement fully authoritative. It was submitted to many leading scientists in various countries. They examined it in detail and a number of them suggested additions and amendments. The competence and objectivity of the scientists who signed the document in its final form cannot be questioned.

In organizing the meeting of experts which produced this authoritative declaration on the race problem. Unesco took up again, after a lapse of fifteen years, a project which the International Institute of Intellectual Co-operation has wished to carry through but which it had to abandon in deference to the appeasement policy of the pre-war period. The race question had become one of the pivots of Nazi ideology and policy. Mazaryk and Benes took the initiative in calling for a conference to re-establish in the minds and consciences of men everywhere the truth about race. Scientists were unanimous in wishing to have the opportunity of denouncing before world opinion the absurdity of the racist dogma. But they were not given such an opportunity. Nazi propaganda was able to continue its baleful work unopposed by the authority of an international organization.

Knowledge of the truth does not always help change emotional attitudes that draw their real strength from the subconscious or from factors beside the real issue. Knowledge of the truth can, however, prevent rationalizations of reprehensible acts or behaviour prompted by feelings that men will not easily avow openly. Unesco has the will and the means to make available to everyone the achievements of science, if those achievements can help to lessen the hatreds that separate human groups from one another. But Unesco can really succeed in this task only if it is careful to present the facts in all their complexity without trying to hide ignorances and doubts.

Science was faced with the problem of race at the beginning of the nineteenth century when the great evolutionary theories were being formulated. Unfortunately, the problem soon shifted from the purely scientific field to the field of politics. As a result, the discussions which it has provoked have rarely been free from the passions and prejudices of the moment.

But psychology, biology and cultural anthropology, which have developed so remarkably during the last fifty years, have made possible extensive inquiries and experimental research studies into the problem. The results of this important work are presented in general terms in the declaration of the experts assembled by Unesco. It should not be forgotten, however, that new methods and techniques of appraising results are being put into practice every day. At the present moment, it is impossible to demonstrate that there exist between "races" differences of intelligence and temperament other than those produced by cultural environment. If, tomorrow, more accurate tests or more thorough studies should prove that "races" as such do, in fact, have different innate faculties or aptitudes, Unesco's moral position on the race question would not be changed.

Racism is a particularly vicious and mean expression of the caste spirit. It involves belief in the innate and absolute superiority of an arbitrarily de-

6. National, religious, geographic, linguistic and cultural groups do not necessarily coincide with racial groups: and the cultural traits of such groups have no demonstrated genetic connexion with racial traits. Because serious errors of this kind are habitually committed when the term "race" is used in popular parlance, it would be better when speaking of human races to drop the term "race" altogether and speak of *ethnic groups*.

7. Now what has the scientist to say about the groups of mankind which may be recognized at the present time? Human races can be and have been differently classified by different anthropologists, but at the present time most anthropologists agree on classifying the greater part of present-day mankind into three major divisions, as follows:

The Mongoloid Division
The Negroid Division
The Caucasoid Division

The biological processes which the classifier has here embalmed, as it were, are dynamic, not static. These divisions were not the same in the past as they are at present, and there is every reason to believe that they will change in the future.

8. Many sub-groups or ethnic groups within these divisions have been described. There is no general agreement upon their number, and in any event most ethnic groups have not yet been either studied or described by the physical anthropologists.

9. Whatever classification the anthropologists makes of man, he never includes mental characteristics as part of those classifications. It is now generally recognised that intelligence tests do not in themselves enable us to differentiate safely between what is due to innate capacity and what is the result of environmental influences, training and education. Wherever it has been possible to make allowances for differences in environmental opportunities, the tests have shown essential similarity in mental characters among all human groups. In short, given similar degrees of cultural opportunity to realize their potentialities, the average achievement of the members of each ethnic group is about the same. The scientific investigations of recent years fully support the dictum of Confucius (551-478 B.C.) "Men's natures are alike; it is their habits that carry them far apart."

10. The scientific material available to us at present does not justify the conclusion that inherited genetic differences are a major factor in producing the differences between the cultures and cultural achievements of different peoples or groups. It does indicate, however, that the history of the cultural experience which each group has undergone is the major factor in explaining such differences. The one trait which above all others has been at a premium in the evolution of men's mental characters has been educability, plasticity. This is a trait which all human beings possess. It is indeed, a species character of *Homo sapiens*.

11. So far as temperament is concerned, there is no definite evidence that there exist inborn differences between human groups. There is evidence that whatever group differences of the kind there might be are greatly over-

TEST OF THE STATEMENT ON "RACE"
ISSUED 18 JULY 1950

1. Scientists have reached general agreements in recognizing that mankind is one; that all men belong to the same species, *Homo sapiens*. It is further generally agreed among scientists that all men are probably derived from the same common stock; and that such differences as exist between different groups of mankind are due to the operation of evolutionary factors of differentiation such as isolation, the drift and random fixation of the material particles which control heredity (the genes), changes in the structure of these particles, hybridization, and natural selection. In these ways groups have arisen of varying stability and degree of differentiation which have been classified in different ways for different purposes.

2. From the biological standpoint, the species *Homo sapiens* is made up of a number of populations, each one of which differs from the others in the frequency of one or more genes. Such genes, responsible for the hereditary differences between men, are always few when compared to the whole genetic constitution of man and to the vast number of genes common to all human beings regardless of the population to which they belong. This means that the likenesses among men are far greater than their differences.

3. A race, from the biological standpoint, may therefore be defined as one of the group of populations constituting the species *Homo sapiens*. These populations are capable of inter-breeding with one another but, by virtue of the isolating barriers which in the past kept them more or less separated, exhibit certain physical differences as a result of their somewhat different biological histories. These represent variations, as it were, on a common theme.

4. In short, the term "race" designates a group or population characterized by some concentrations, relative as to frequency and distribution, of hereditary particles (genes) or physical characters, which appear, fluctuate, and often disappear in the course of time by reason of geographic and or cultural isolation. The varying manifestations of these traits in different populations are perceived in different ways by each group. What is perceived is largely preconceived, so that each group arbitrarily tends to misinterpret the variability which occurs as a fundamental difference which separates that group from all others.

5. These are the scientific facts. Unfortunately, however, when most people use the term "race" they do not do so in the sense above defined. To most people, a race is any group of people whom they choose to describe as a race. Thus, many national, religious, geographic, linguistic or cultural groups have, in such loose usage, been called "race", when obviously Americans are not a race, nor are Englishmen, nor Frenchmen, nor any other national group. Catholics, Protestants, Moslems and Jews are not races, nor are groups who speak English or any other language thereby definable as a race; people who live in Iceland or England or India are not races; nor are people who are culturally Turkish or Chinese or the like thereby describable as races.

■ formal manner what is at present scientifically established concerning individual and group differences.

(1) In matters of race, the only characteristics which anthropologists can effectively use as a basis for classifications are physical and physiological.

(2) According to present knowledge there is no proof that the groups of mankind differ in their innate mental characteristics, whether in respect of intelligence or temperament. The scientific evidence indicates that the range of mental capacities in all ethnic groups is much the same.

(3) Historical and sociological studies support the view that genetic differences are not of importance in determining the social and cultural differences between different groups of *Homo sapiens*, and that the social and cultural changes in different groups, have, in the main, been independent of changes in inborn constitution. Vast social changes have occurred which were not in any way connected with changes in racial type.

(4) There is no evidence that race mixture as such produces bad results from the biological point of view. The social results of race mixture whether for good or ill are to be traced to social factors.

(5) All normal human beings are capable of learning to share in a common life, to understand the nature of mutual service and reciprocity, and to respect social obligations and contracts. Such biological differences as exist between members of different ethnic groups have no relevance to problems of social and political organization, moral life and communication between human beings.

Lastly, biological studies lend support to the ethic of universal brotherhood; for man is born with drives toward co-operation, and unless these drives are satisfied, men and nations alike fall ill. Man is born a social being who can reach his fullest development only through interaction with his fellows. The denial at any point of this social bond between man and man brings with it disintegration. In this sense, every man is his brother's keeper. For every man is a piece of the continent, a part of the main, because he is involved in mankind.

The original statement was drafted at Unesco House, Paris, by the following experts:

Professor Ernest Beaglehole, *New Zealand*, Professor Juan Comas, *Mexico*, Professor L. A. Costa Pinto, *Brazil*, Professor Franklin Frazier, *United States*, Professor Morris Ginsberg, *United Kingdom*, Professor Humayun Kabir, *India*, Professor Claude Levi-Strauss, *France*, Professor Ashley Montagu, *United States* (*Rapporteur*).

The text was revised by Professor Ashley Montagu, after criticism submitted by Professors Hadley Cantril, E. G. Conklin, Gunnar Dahlberg, Theodosius Dobzhansky, L. C. Dunn, Donald Hager, Julian S. Huxley, Otto Klineberg, Wilbert Moore, H. J. Muller, Gunnar Myrdal, Joseph Needham, Curt Stern

ridden by the individual differences, and by the differences springing from environmental factors.

12. As for personality and character, these may be considered raceless. In every human group a rich variety of personality and character types will be found, and there is no reason for believing that any human group is richer than any other in these respects.

13. With respect to race-mixture, the evidence points unequivocally to the fact that this has been going on from the earliest times. Indeed, one of the chief processes of race-formation and race-extinction or absorption is by means of hybridization between races or ethnic groups. Furthermore, no convincing evidence has been adduced that race-mixture of itself produces biologically bad effects. Statements that human hybrids frequently show undesirable traits, both physically and mentally, physical disharmonies and mental degeneracies, are not supported by the facts. There is, therefore, no biological justification for prohibiting intermarriage between persons of different ethnic groups.

14. The biological fact of race and the myth of "race" should be distinguished. For all practical social purposes "race" is not so much a biological phenomenon as a social myth. The myth "race" has created an enormous amount of human and social damage. In recent years it has taken a heavy toll in human lives and caused untold suffering. It still prevents the normal development of millions of human beings and deprives civilization of the effective co-operation of productive minds. The biological differences between ethnic groups should be disregarded from the standpoint of social acceptance and social action. The unity of mankind from both the biological and social viewpoints is the main thing. To recognize this and to act accordingly is the first requirement of modern man. It is but to recognize what a great biologist wrote in 1875: "As man advances in civilization, and small tribes are united into larger communities, the simplest reason would tell each individual that he ought to extend his social instincts and sympathies to all the members of the same nation, though personally unknown to him. This point being once reached, there is only an artificial barrier to prevent his sympathies extending to the men of all nations and races." These are the words of Charles Darwin in *The Descent of Man* (2nd ed., 1875, pp. 187-8). And, indeed, the whole of human history shows that a co-operative spirit is not only natural to men, but more deeply rooted than any self-seeking tendencies. If this were not so we should not see the growth of integration and organization of his communities which the centuries and the millenia plainly exhibit.

15. We now have to consider the bearing of these statements on the problem of human equality. It must be asserted with the utmost emphasis that equality as an ethical principle in no way depends upon the assertion that human beings are in fact equal in endowment. Obviously individuals in all ethnic groups vary greatly among themselves in endowment. Nevertheless, the characteristics in which human groups differ from one another are often exaggerated and used as a basis for questioning the validity of equality in the ethical sense. For this purpose we have thought it worth while to set out in

Freedom of movement underlies the concept of private property rights. A person has the right to exclusive possession and use of that which he has assembled and improved without trespass against others—the right to the product of his own labor. Any move of a man might be deemed proper and beneficial when he acts to assemble, transport, or otherwise convert the free gifts of Nature so that they may satisfy human needs more readily. This involves no infringement on the equal right of others. It would seem to be the kind of movement that should not be discouraged by a man or by government.

On the other hand, freedom of movement may lead to trespass. A person may move or act in such a way as to threaten the life, or to seize or damage the property, of someone else. His apparent personal gain would be at the direct expense of another person. Surely, government should lend no encouragement to such harmful actions or threats of harm by individuals.

TO TRADE, IF ONE CHOOSES

The Problem of society, then, is to permit and encourage individuals to move and act in a productive and beneficial manner, and to avoid harmful intervention or trespass. The founding fathers wisely depended upon voluntary exchange—freedom of trade in the competitive market place—as the automatic, non-governmental guide to productivity and progress among men. They delegated to government the power to restrict only those actions of individuals designed to circumvent the free market through fraud, deceit, or coercion. The penalty for violation was restitution for damages, or imprisonment, or some other restraint upon that person's freedom to act or move.

The freedom to trade with one another is an essential part of the right to private possession and use of property. And freedom to move is essential to active participation in the free market. Our founding fathers understood why no government should have the power to erect barriers to trade or travel within the nation. An individual was to be free to move in pursuit of whatever opportunity presented itself, risking his own property, his own labor, his own life to make the move; others were not to be forced to help him against their wills.

Freedom of choice is the door upon which Opportunity knocks. It is proper that a man assume responsibility for satisfying his own needs—he be able to take care of himself and his own. But that should not preclude his recognition of an opportunity to trade goods or services with someone else, to their mutual advantage. Further, it might be more economical at times for a person to move toward the desired goods or services than to have them moved toward him. Trade, and migration, and self-sufficiency are possible alternatives or economic substitutes for one another. Since these alternatives are involved in every item in the welfare of every individual in the world, under an endless variation of circumstances, it seems necessary to allow the individual a great deal of freedom to judge what is the best opportunity at the time.

Every day of the year millions of Americans cross village, town, county, and state boundaries for business or pleasure. Such freedom of movement

APPENDIX B.

THE FREEDOM TO MOVE *

"Don't fence me in! You can't do this to me." Perhaps that's not a literal translation of those sounds of protest from Junior's play pen, but it's the general idea. He wants to move and act as he pleases. So do his parents. And there in miniature is the whole problem of human relationships in a society of individuals. Each of us wants freedom of movement and action. Yet in a small family of only two or three persons, there always is the question of how much freedom each may exercise without affecting seriously the freedom of others.

For his own temporary protection, and for the peace of mind of those who love him, Junior may be penned. Whether it's a play pen or a prison to him depends in great measure upon his perspective, upon his comprehension of such terms as life, liberty, and the pursuit of happiness.

Or, there may be the distressing family problem where one of the members is violently insane, endangering the lives of others. At the instigation of those nearest and dearest to him, he may be confined to a strait jacket or a padded cell. Any society, even though it be a close family group, constantly faces the problem of defining and discouraging the movements and acts of individual members which might threaten unjustly the life, liberty, or happiness of others.

RESORT TO GOVERNMENT

The Founding Fathers of the United States of America believed that to secure the rights of each individual to life, liberty, and the pursuit of happiness, governments are instituted among men, deriving their just powers from the consent of the governed. But the founding fathers were concerned primarily with the rules of government for a society considerably larger than the family unit. They believed that in their hands lay the destiny of a whole new nation, born of successful revolt against a tyrannical government. They were concerned—and justly so—about man's freedom to move. They thought it necessary to give their government the power to restrain the harmful acts and movements of individuals, but otherwise, they wanted freedom from government domination. They did the best they could to draw that fine line beyond which government control becomes more harmful than helpful to society.

MOVING TO ACQUIRE PROPERTY

One of the guiding principles of the founding fathers was a belief that a man's property is an important aspect of his life, and that his liberty involves a right to the private accumulation, ownership, control, and use of property in any manner not injurious to others. They thought Nature's bounties were for those ambitious enough to discover and harvest them. The wisdom of their views is recorded in American history for those who will read and reason.

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An example of these objectionable "conditions" attributed to the British government was the Quebec Act of 1774, which extended the boundaries of Quebec to the Mississippi and Ohio rivers, and which seemed to the colonists to limit their freedom to migrate over the Alleghenies.

We have moved far indeed from the idea of 1776 that immigration should not be restricted by government. The "national origins" immigration quotas put in force in 1929, and which still apply to all countries outside the Americas, limit the number of immigrants under quotas to about 154,000 persons a year. The quotas are allocated to foreign countries in accordance with each country's contribution to the total white population of the United States in 1920. Under this arrangement, persons from Northern and Western Europe are allowed entry preference over those from Southern and Eastern Europe by a ratio of more than five to one. Persons of African and Oriental nations, with their annual quotas of 100, or none at all, are virtually excluded from our shores.

ANOTHER LOOK AT OUR DOMESTIC POLICY

In view of this complete about-face in our attitude toward international migration, perhaps we should take another look at our domestic policy of freedom to move. If it is sound to erect a barrier along our national boundary lines, against those who see greater opportunities here than in their native lands, why should we not erect similar barriers between states and localities within our nation? Why should a low-paid worker—"obviously ignorant, and probably a Socialist"—be allowed to migrate from a failing buggy shop in Massachusetts to the expanding automobile shops of Detroit. According to the common attitude toward immigrants, he would compete with native Detroiters for food and clothing and housing. He might be willing to work for less than the prevailing wage rate in Detroit, "upsetting the labor market" there. His wife and children might "contaminate" the local sewing circles and playgrounds with foreign ways and ideas. Anyhow, he was a native of Massachusetts, and therefore that state should bear the full responsibility for his welfare."

Those are matters we might ponder, but our honest answer to all of them is reflected in our actions—we'd rather ride in automobiles than in buggies. It would be foolish to try to buy an automobile or anything else in the free market, and at the same time deny any individual an opportunity to help produce those things we want.

OUR REASONS FOR TRADE

Suppose you want to build a new porch for your home. You know how to dig for the footings, build the forms, pour the foundation, steps, and concrete floor, erect the posts and rafters, nail on the trim and roofing, and paint it. Why should you permit a ditch digger, carpenter, mason, or painter to come onto your property and perform these jobs that you could do? The answer, of course, is that if you are sufficiently productive at some other specialized occupation, then it is to your own advantage to stick to that occupation and hire "foreigners" to build your porch.

has been enjoyed by so many generations in America that few persons today can imagine what it would be like if that freedom were to be denied.

The American workman from Boston has been free to seek employment in Detroit or San Francisco, or any other city or community of the United States, and he may move his family there with no governmental questions asked or strings attached. An Indiana farmer has been free to sell his farm and to buy another in Oregon or in Florida, or in any of the 48 states, and to move to that new community without seeking the permission of any public official. Entire business operations have been moved from one state to another, quite free of official restraint. Most American communities seek to attract rather than to repel people; they want their town to grow and prosper. Some persons, in their zeal to entice new business into a community, even advocate local tax exemption for the newcomer, implying a willingness to bear the added tax themselves.

The freedom of the individual to move toward greener pastures, wherever they may seem to be, has been a vital part of that freedom of commerce—the freedom of choice that has constituted the truly distinctive characteristic of "the American way."

The owner of capital goods—the tools and facilities of industry—has been free to move them toward whatever use and location seems most attractive. And the workman, who would use those tools and facilities to increase the productivity of his own efforts, has been free to move toward new and better opportunities. There has been such progress under these conditions that entire industries have been displaced by more useful ones, and entire communities have been abandoned as ghost towns because of Opportunity's knock at another door. And such changes, occurring because there seemed to be some personal advantage in moving, have brought continuous gain in the general welfare. "The American way" has been to allow each individual to move about in pursuit of the most attractive of all the alternative opportunities.

BUT DO NOT CROSS THIS LINE

In view of our long experience of near-perfect freedom to move about as each might choose, some of us may not realize the limitations that confront people in many other parts of the world who might like to move toward something better. Many who might choose to enter the United States, peacefully observing our laws and playing their own way, are denied entry. Our community slogans now seem to read: "Welcome to all peaceful and productive newcomers—except foreigners." And a foreigner here is an individual who has crossed a special political line, supposedly bounding "the land of the free"!

The American Declaration of Independence made this protest against the tyrant King of England:

"He has endeavored to prevent the population [growth] of these states; for that purpose obstructing the laws for naturalization of foreigners; refusing to pass others to encourage their migration hither; and raising the conditions of new appropriations of lands."

and contaminate our society, undoubtedly seems real to any person who thinks of himself as a member of a superior class or race. Such a person, like any good disciple of Marx, is assuming the existence of classes and is convinced that he is qualified to judge others and to sort them into these classes. If that were to be the new definition of Americanism, then there would indeed be cause to fear social contamination through immigration—at least until foreigners have learned that America has been “reserved for upper classes only.”

FEAR NO. 3

Immigrants might deprive our own workers of jobs and depress the wage scale. The fear that immigrants might take the jobs of American workers is based on the fantasy that the number of jobs to be filled within our economy is strictly limited. Those who suffer that illusion insist that the prevailing job patterns must be retained, and that present levels of production and distribution are not to be exceeded under any circumstances. That concept defines a “job” as “only that which some person happens to be doing at the present moment.”

But traditionally in America a job has been the opportunity to engage in productive work, thus satisfying one's own needs directly from one's own efforts or indirectly through voluntary exchange of one's own goods or services for those of others.

Some persons contend that in former years there were unlimited jobs involved in carving modern America out of the wilderness, but that now all such new frontiers are closed. They overlook the fact that individuals still do—and undoubtedly always will—entertain unsatisfied desires for more and more goods and services, which industrious and ingenious individuals constantly are producing in response to opportunities. If there is freedom to think, to trade, and to move, then opportunities for new, creative jobs are not limited to the wilderness or a spot of idle land. Our ancestors of a century ago didn't know how to carve automobiles, and planes, and radio and television sets out of the wilderness. But we are doing those things today because some individuals—many of them immigrants—saw new opportunities to serve others and to be served in exchange.

The immigrant who chooses to accumulate the means of passage to America, in preference to all other available opportunities for disposing of his time and property, has had a kind of practical experience in the free market—the voluntary exchange of part of his goods or services for something of greater value to him. When a person exchanges property for another's services, he creates a “job.” The free economy is not a competitive contest with only one winner. Everyone can win according to his contribution.

In a free market, the only possible way an immigrant can take a job away from another American workman is to produce and offer more and better goods or services than the other fellow does. But the other fellow need not become unemployed for that reason alone, any more than you need be unemployed if you hire someone else to clean out your septic

Do you inquire into the ancestry, political views, religion, educational level, and living standards of each person you admit to your property, or meet in the market place, in the ordinary course of business? Do you employ their services and admit to your property only those workmen who demand wages at least as high as your own? Or do you believe that each person should be allowed to move about and compete in a free market and to receive as little or as much as he and his employers can agree upon?

Most of us do not seek to bar from our midst those fellow Americans with whom we can exchange goods or services voluntarily and to mutual advantage. For reasons acceptable in our daily living, we allow others to enter our homes, and we open to the public our privately owned places of business. To practice discrimination against those within the United States who volunteer to serve and supply our desires most satisfactorily would be a rare form of economic suicide. Instead, each of us is constantly on the move, seeking the bargains others offer to us, and trying to find the best possible opportunity to be of service to others.

Our domestic relationships would be harmed seriously by restraints upon man's freedom to migrate. But why shouldn't the same reasoning hold for our foreign relationships? There must be some other reason why we have erected barriers at our national boundary lines, while rejecting them at our internal boundaries.

Immigration to this country was particularly heavy from 1890 to 1914. World War I interrupted that movement. Shortly after the war, we began erecting barriers in earnest. Our new immigration policy therefore might be attributed to fears which the American people acquired as a consequence of that heavy influx at the turn of the century.

FEAR NO. 1

The "melting pot" might fail to assimilate newcomers. This notion has as little merit as the idea that a third-generation Yankee's digestive tract isn't capable of assimilating a bunch of carrots grown by a foreign-born Japanese or Italian vegetable gardener. The assimilation of a foreign-born person is accomplished when the immigrant willingly comes to America, paying his own way not only to get here but also after he arrives, and peacefully submitting to the laws and customs of his newly adopted country. Freedom to exchange goods and services voluntarily in the market place is the economic catalyst of the American "melting pot." Christian-like morality is the social catalyst—and if it has come to be in short supply among native Americans, the blame for that shortage should not be laid upon our immigrants.

A century ago, Americans who were considerably closer to former foreign allegiance than most of us are today, were assimilating one immigrant yearly for each 80 persons already living here. Our present quotas assume that it takes nearly 1,000 Americans to assimilate one foreigner yearly.

FEAR NO. 2

The "wrong kind" of people might come to America. The danger that "a poorer class" might come from Asia or Africa or Southern and Eastern Europe

It is the failure to understand the almost magical formula, whereby more workers create more capital and discover new resources to provide additional jobs, which leads the advocates of socialism to fear over-population and depletion of resources. And under the socialist blight on production such fear, of course, would be fully justified. For the system which discourages initiative and encourages laziness is in itself the cause of over-population.

FEAR NO. 5 .

Among the immigrants, there might be Bolsheviks and Anarchists who want to destroy our form of government. Now, on the surface, it doesn't seem possible that immigrants could arrive here in such numbers as to overpower 150 million persons who believe in, and want to retain, a non-socialistic form of representative government.

Perhaps what is feared is the importation of a new idea of the function of government—of the relationship between the individual and his government. If this new idea could be made to sound attractive enough to a majority of American citizens, the economic system of America might be changed even under a representative form of government.

If that has been our fear, it very well might have been justified. For America has been rapidly substituting a socialistic state control for the traditional system of private enterprise. We have come to embrace the concept that freedom is for only the politician who administers our affairs of government, rather than for the individual citizen.

There is no question that some of those who migrated to America held radical ideas about government. And it might seem soothing to our American-born selves to blame immigrants entirely for our progress toward socialism. But let us not mistake persons for ideas, the ideas are the root of the problem. Migration of persons is not a reliable measure of the flow of ideas. Karl Marx never migrated to America, yet his ideas were propagated here—not alone by word of mouth, but also through books, pamphlets, letters, and other means of communication.

No person can isolate himself from all the false ideas in the world without shutting out simultaneously all the good ideas, too. The person who is able to distinguish between truth and falsehood welcomes a preview of all new ideas. He is then free to reject the socialistic ideas, for he recognizes the suggestion of an international barrier to the flow of ideas as being one of the more vicious forms of collective thought control. The person who wants his government to tell him what to think isn't worthy of freedom.

SPREADING IDEAS

With reference to this spreading of ideas, perhaps we should re-examine our own tactics in the current ideological battle against communism. In this contest, it is important that foreign people have an opportunity to understand our ideals and objectives. We are trying to convey this information through the "Voice of America" radio programs and publications. But

tank while you are doing some other work which you consider to be more worthy of your time and skills. That is the competitive key to progress among free men, whereby each finds the task for which he alone is best fitted. To deny that key to a single individual, whether he be your neighbor or a foreigner, is to deny the concept and the blessings of freedom to all men. For if any person is restrained by force from being as highly productive as he knows how, it necessarily follows that those who restrain him thereby have deprived everyone, including themselves, of the opportunity to bid for the extra goods or services he would have offered.

The fear that heavy immigration of workers would depress the wages of native workers is an outgrowth of socialist doctrine. Socialism is so concerned with consumption and "equitable distribution" that it neglects the source of production. It fails to recognize that there can be more and more to consume only if capital and tools are first produced to give leverage to the productive power of man. Under strict socialism, there would be only a limited number of jobs in any society. And under socialism, the American wilderness would have remained essentially uncarved.

In our modern mood of playing Santa Claus to the world, by the force of government, we may forget that capital once voluntarily flowed to America in goodly quantities, teaming up with the immigrant workers who were building a civilization in a wilderness. Like water running downhill, capital flows into those areas where the manpower exists to use it to the best advantage. Capital is without value except as there are men willing to use those tools and productive facilities.

FEAR NO. 4

Immigrants might cause over-population and depletion of our natural resources. Undoubtedly the American Indians feared that foreigners would come to America in such great numbers as to overtax their natural resources. And we certainly did. The only "natural resources" available to them were the few they were able to recognize and use—such as wild buffalo and fish, skins and furs, birch bark, and flint for arrowheads.

Today we recognize far greater natural resources in America than were known a few centuries ago, yet many of us also seem to be afraid that still others will come to hasten depletion of those resources. It is a defeatist attitude, an admission that our generation has lost the key to progress—the capacity for discovering new uses for things which are plentiful and new items to satisfy our most urgent needs. This dog-in-the-manger attitude is that if I can't recognize a new opportunity, I won't let a foreigner come here and try it, even at his own expense! If I translate my own lack of vision into a supposed permanent shortage of natural resources, whom should I challenge—a mere mortal from foreign shores, or the Maker of All Things?

One further question for the consideration of those who fear we are nearing the bottom of natural resources in America: Why should we pull down around ourselves the immigration curtain which by every rule of reason and justice ought to and does bar us from looking elsewhere in the world for satisfaction of our wants? We thus bar ourselves from the discoveries and developments which people of other nations voluntarily might offer in trade.

York City as American citizens. Most of them live within the congested area of a few blocks at the upper end of Central Park, known as "Spanish Harlem" and "New York's worst slum." Into this area, the city pumps "relief" funds in excess of \$15,000,000 annually, the result of which is to attract a steady stream of these people there and to keep them there.

It is not, of course, the intent of advocates of the "welfare state" to create and perpetuate slum conditions. But that is the certain consequence of subsidizing slum dwellers, of "benevolently" discouraging them from moving in response to opportunities for work and economic independence. Puerto Ricans have been attracted to "Spanish Harlem"—to what they apparently think is an improvement over their previous way of life. But these slums should be a mere stepping stone for them. Instead of that, the stepping stone is greased with "relief" funds aggravating a congestion which a free market otherwise would have tended to relieve. Thus, under the inherently false banner of public charity—robbing Peter to pay Paul—we tend to limit the movement and to discourage the economic advancement of large numbers of our own citizens. We close the market place of free choice, barring the only path man ever has known to continuous improvement of his welfare. When a man who could have helped himself—and others—is bribed to refrain from doing so, he—and the others—are thereby harmed.

The "Okies" in California and the Puerto Ricans in New York City are not isolated examples. Any community would face the same problem upon a similar interference with the freedom to move and the stimulus to work. A community operating on the competitive basis of the free market will welcome any willing newcomer for his potential productivity, whether he brings capital goods or merely a willingness to work. Capital and labor then attract each other, in a kind of growth that spells healthy progress and prosperity in that community. That principle seems to be well recognized and accepted by those who support the activities of a local chamber of commerce. Why do we not dare risk the same attitude as applied to national immigration policy?

HOMETOWN, U S. A.

500 "foreigners" are attracted to jobs there. They might even be willing to accept lower than the prevailing wages in order to get jobs at the automobile factory. But this doesn't necessarily throw the 500 former employees out of work. Instead, a whole chain of events comes into play automatically, creating new jobs. Another automobile manufacturer, or the same one, observing the abundant labor force, decides to build a new assembly plant in the area. New homes will be needed and the building trade will take new employees. New stores, banking facilities, service industries and farm production will be needed, attracting investment capital to the community and creating new job opportunities. That is the way to progress under the expanding, competitive,

we've become so engrossed with our collective broadcasting that we neglect what is possibly a more effective means of communication.

In the October 1917 issue of *Fortune*, Herrymon Maurer wrote: "America may have been as well known to 19th century Europe through the letters of immigrants as it is now through newspapers and radio." Yet, perhaps even better known in the 19th century, for then there was the personal touch—evidence of individuality which was America's mark of distinction.

Unlike the "*Voice of America*," those letters from immigrants to the folks they left behind cost the American taxpayer nothing. There was no coercive practice behind that kind of transmission of idea and information. In a free world, information moves from person to person like the dropping of the gentle rain from heaven; it need not be pumped through expensive and biased propaganda pipelines.

Can we hope to explain the blessings of freedom to foreign people while we deny them the freedom to cross our boundaries? To advertise America as the "land of the free," and to pose as the world champion of freedom in the contest with communism, is hypocritical, if at the same time we deny the freedom of immigration as well as the freedom of trade. And we may be sure that our neighbors overseas are not blind to this hypocrisy.

THE ALMSHOUSE

Today, many native Americans are helping to place leaders in high offices of government on socialist platforms. The idea of a "welfare state," that will use political force to take from each according to his ability and give to each according to his need, is quite incompatible with the concepts of freedom of exchange on a voluntary basis; of freedom to come and go as each person chooses, so long as he does not trespass against the similar freedom of others. When government begins to promise something for nothing to a favored group of citizens, then it becomes necessary to restrict the numbers of those who may enter the places of privilege. Make life in the almshouse sufficiently attractive and the inmates will lock the doors from the inside, to keep the outsiders out.

Understanding this situation doesn't demand a vivid imagination. There are plenty of examples right here in our own communities which show how it works. California didn't attract all the "Okies" by offering job opportunities. Instead, California also tried to offer something for nothing—"Ham n' Eggs," and pensions, and comfortable living even for those who refused to work for it—with the result that families from Oklahoma came to partake of these bounties, which outranked existing opportunities in Oklahoma. This was a subsidized migration to California at the expense of the Californians whose own earnings and savings were taxed to support it.

THE PUERTO RICAN MIGRATION

Another study of the effects of uneconomic interference with freedom of movement involves the 350,000 Puerto Ricans who have migrated to New

WHAT IS RIGHT?

The person who is dissatisfied with the course being followed in America today will find in his own mind and conscience the means of changing it. His problem is to determine what is right—not what is right for the world, or the federal government, or his own state—but what is right for himself. Otherwise, he pursues the blind policy that someone else somehow is better qualified to determine his needs and to satisfy them than he could do for himself. Thus, by default, he lends himself to class membership. He joins one or another group, seeking one or another special privilege, or protection, or security. He directs his political power toward preventing “foreigners” from sharing in the plunder of his special gang. He helps to build the walls within which some of his own gang eventually will imprison him.

If we’ve become victims of the illusion that we have to know all the answers for all the people all the time, let us abandon that obsession. Let us reflect, instead, upon the moves each of us has made in his own lifetime. Can you honestly say now: “Someone should have stopped me from making one of those moves”? Do you feel that there should have been a tangle of “international barriers” along the way to have changed the course of your life from what it has been? How many such barriers would you want, and just where would you have them located? Who should have been empowered to prevent these moves of yours?

ISOLATION BY ERROR

American citizens have created a high and rising standard of living for themselves through their freedom of movement and freedom of choice in the market place. Now we have hung a sign at our gates. “Freedom to Enter This Market Is Denied—Hurrah for Freedom!”

But let us study that sign carefully, for it reads the same on either side. The same gate which bars outsiders also shuts us in. We harm ourselves by our practice of compulsory racial discrimination on a national basis. This governmental restriction precludes our welcoming and trading with those who are most willing and able to serve our needs. Our collective abandonment of the economic system of the free market leaves for us the controlled communal life, where everyone wants to be a consumer without producing anything.

THE FUNDAMENTAL PROBLEM

Our immigration policy merely reflects the existence of this serious internal problem in America. Our present policy toward immigrants is consistent with the rest of the controls over persons which inevitably go with national socialism. But the controlled human relationships within the “welfare state” are not consistent with freedom. Great Britain once thought she could deny freedom to American colonists. And now, her own people have traded their freedom for nationalized austerity. Even a “prosperous” modern America can ill afford travelling that same course. If we do, our community, too, will lose its capacity to attract newcomers. Then we wouldn’t need an immigration policy. But who among us would want to remain in a community where opportunities no longer exist?

free market system we have known in America. Capital and people keep on the move toward the most attractive job opportunities. Individuals thus do what no government can do for them.

HOMETOWN, SOCIALIZED

Suppose, now, that this same community had been socialized, and that 500 unsuspecting newcomers seek entry. In other words, suppose that the individual freedom of choice in that community had been delegated to a central planning authority—the socialist government. One manifestation of such governmental authority would be a closed union shop at the automobile assembly plant—that union working in close collaboration with similar unions in all other major industries in the community. No wage cutting by “foreigners” under those conditions! Jobs only for those who already have them! The 500 newcomers would live on public alms in idleness and, according to the theory, the rest of the community would support them.

Another manifestation of governmental authority in the socialized community is to be seen in the farm price support program and production quotas. No new quotas available for newcomers under those conditions!

Meanwhile, of course, such industries as housing, mining, transportation, banking, electrical power, communications—eventually all industry—would be nationalized. Under socialism, there ceases to be any private property which government can confiscate for redistribution as subsidy or relief payments, or other bribes to voters.

Outright confiscation or progressive taxation of all income and property, for distribution to those who produce nothing, bars all hope of progress within a community. In that event, further growth of the community by immigration becomes a thing to be feared and ruthlessly curbed, since its sole attraction is for those who are allowed to share in the loot. Meanwhile, there also must be a police force to prevent escape from the community of those persons with income or property that can be looted. So, after a period of trial and failure—the danger is seldom foreseen—what can the socialized community do except close its doors to foreigners?

THE OTHER SIDE OF THE SUBSIDY

When government promises to use the power it commands to confiscate the wealth of some citizens for the special privilege of others, as in the case of farm subsidy, price control, rent control, veterans' benefits, and the like—alms of any sort to those who otherwise might have done well on their own—then it behooves the government to limit the number of those who may share these privileges. And it means that those who for a short time are allowed to share the loot eventually will be forced to produce—told when and where to work—by the very same authority which had promised something for nothing. After freedom of entry has been denied to foreigners, there follows logically the denial of freedom of movement to our own citizens—and for precisely the same reasons. The paralysis of movement which starts with immigration restrictions will spread and spread. For that is the natural course of this social cancer.

Negotiations are now under way about the exact status of the settlers, who have been offered peasant proprietorship and full citizenship rights. Mr. M. Gopala Menon, the Indian Government's Representative in Malaya, is now in correspondence with Mr. S. Calder, Chief Secretary to the North Borneo Government, on the details of the scheme.

North Borneo abounds in mines, timber and rubber forests, and cultivable land. A good part of the local communities—known as Sea Dyaks and Land Dyaks—being nomadic in habits and occupation, there is a shortage of labour for tapping the resources of the island. With a pleasant climate and a lot of rain, North Borneo could be a very suitable place for Indian settlement, Mr. Menon told the P.T.I. correspondent.

Mr. Menon, who toured North Borneo last September, is optimistic about the suitability of the local conditions for settlement of Indians in the island. Sarawak had also asked India for skilled workers for her oilfields.—P.T.I.

APPENDIX C.

NORTH BORNEO WANTS INDIAN SETTLERS

Request To Government

I

NEW DELHI, January 9, 1952. The Government of British North Borneo has requested the Government of India to permit emigration of 10,000 Indian settlers, preferably from South India, with their families for permanent residence in Borneo, it is learnt.

The Borneo Government is understood to have offered the settlers attractive terms which will give them complete equality of status with all other British citizens in the colony here today.

They will also be provided land for the cultivation of rice and other crops and in addition other avenues of employment, such as Government service, will be open to them. The Borneo Government would pay all costs of their transport.

Although the emigration laws in India prohibit emigration of unskilled labour, there is no statutory bar to Indians leaving the country with the object of permanently settling abroad. The Government of India, therefore, it is learnt, will be inclined to agree to the North Borneo Government's request provided the Indian settlers are given full proprietorship in land. The Government has also asked for more information as to the size of the holdings which the settlers will be given and the equipment and financial assistance that the Government of North Borneo would provide.—P.T.I.

II

EMIGRATION TO NORTH BORNEO

NEW DELHI, February 2, 1952. The request of the Government of British North Borneo for 10,000 Indian families and Indian labour to be permanently settled in Borneo is still under consideration of the Government of India, which has asked for further details. So far as emigration of Indian labour is concerned, the Government of India's policy has been one of total prohibition of unskilled labour. Skilled labour could however, be permitted to emigrate if the conditions offered were satisfactory.

As regards the request for families to be settled on the land, the Government of India have asked for details regarding the size of the holding, equipment and financial assistance and the tenancy rights which would be given. Final decision will be taken by the Government of India after the reply has been received from the British North Borneo Government.

III

INDIAN SETTLERS FOR NORTH BORNEO

Agreement on Basic Principles

SINGAPORE, March 1, 1952. India and North Borneo have reached accord on the basic principles governing the immigration of 10,000 Indians to the island this year.

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